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A

GENUINE AND UNIVERSAL

SYSTEM

OF

NATURAL HISTORY;

COMPRISING THE

THREE KINGDOMS OF

ANIMALS, VEGETABLES, AND MINERALS,

ARRANGED UNDER THEIR RESPECTIVE

CLASSES, ORDERS, GENERA, AND SPECIES.

By the late SIR CHARLES LINNÆUS,

PROFESSOR OF PHYSIC AND BOTANY IN THE UNIVERSITY OF UPSAL, AND PRESIDENT OF THE ROYAL ACADEMY AT STOCKHOLM.

IMPROVED, CORRECTED, AND ENLARGED,

By J. FRID. GMELIN, M. D.

PROFESSOR OF NATURAL HISTORY IN THE ROYAL SOCIETY OF GOTTINGEN.

Faithfully translated, and rendered more complete by the Addition of VAILLANT'S beautiful BIRDS of AFRICA; the superb FISH of MARK ELIEZER BLOCH; the Amphibious Animals, Reptiles, Insects, &c. in the costly Works of ALBERTUS SEBA, MERIAN, FABRICIUS, KNORR, &c. the elegant Improvements of the Comte de BUFFON, and the more Modern DISCOVERIES of the BRITISH NAVIGATORS in the South Pacific Ocean, New Holland, New South Wales, China, Cochin-China, &c.

Methodically incorporated and arranged by the EDITORS of the ENCYCLOPÆDIA LONDINENSIS.

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AN UNIVERSAL

SYSTEM

OF

NATURAL HISTORY.

APPENDIX TO THE CLASS *AVES*, OR BIRDS.

THE interruptions which commerce has ſuſtained by the preſent deſtructive war, have hitherto prevented us from redeeming a pledge, given in a time of profound peace, to form an Appendix to the Natural Hiſtory of Birds, from a work at that time publiſhing on the continent, and of which we preſented a ſpecimen in our ſeventh volume. See vol. vii. p. 499. The reſtrictions upon trade have been, however, occaſionally relaxed, ſo as to enable us at length to receive the numbers, not only of that valuable and coſtly work, but of two others publiſhed by the ſame author; and the delay has alſo procured for us other valuable information upon the ſubject of the preſent volume.

The additions moſt numerous and eſſential will be found to apply to the earlier volumes of the Hiſtory of Birds; as it will be ſeen, by a reference to vol. iv. p. 10. that we had not at that time adopted the Linnæan claſſification, Gmelin's complete edition of the Syſtema Naturæ not having then reached us: as ſoon as it did, we made it our groundwork, and gave the CLASSIFICATION at the end of the ſeventh

volume, which muſt be bound at the beginning of the fourth, and with which the following additions will be found to correſpond.

IN THE ORDER OF ACCIPITRES.

VULTUR, THE VULTURE.

The BENGAL VULTURE.—Specific character, brown, head and fore part of the neck naked, pale cheſnut, bill lead-colour tipt with black. The head and neck are covered with a brown down; feet dark brown; claws black; crop protuberant. Inhabits Bengal; length two feet and a half.—Vultur Bengalenſis, *Gmel.* from *Latham.*

The KING OF THE VULTURES.—Vaillant deſcribes this as only a variety, ariſing from ſex or age, of the vulture bearing the ſame name in Briſſon, Buffon, Edwards, &c. See vol. iv. p. 70. Vaillant received it from Cayenne with many others: it was marked as a female; at any rate he ſuppoſes it to have been a young one; and he ſuppoſes the plumage in the very young ones to be entirely black, like the large ſpots on the ſmaller wing-coverts, ſcapulars, and mantle. It can hardly be doubted but this bird was killed juſt when about to moult for its laſt change of colours; for moſt of the carnivorous birds change the colour of their feathers three or four times before they attain their full ſize and complete plumage, which, as before remarked, occaſions much confuſion among naturaliſts who claſs birds from their colours only.—Roi des vautours varié, *Vaillant, Hiſtoire naturelle des Oiſeaux d'Afrique*, N° 13.

The CALIFORNIAN VULTURE.—Black; head and neck naked, pale fleſh-colour; bill whitiſh; feathers of the collar and breaſt lanceolate. Neck inclining to bluiſh each ſide; head blackiſh at the top without any caruncles; wings long; tail large, ſquariſh; feet black, claws long, large, ſharp. Inhabits California;

lifornia; nearly the ſize of the preceding.—Vultur Californianus, *Turton's Tranſlation of Gmelin's Linnæus.*

The ARABIAN VULTURE.—Crown gibbous; body black. Head and neck covered with cinereous down; orbits white; bill black at the tip; cere and feet bluiſh; claws black; ſhoulders furniſhed with looſe cinereous feathers, into which the head is retracted while it ſleeps. Inhabits Arabia; length three feet.—Vultur monachus, *Gmel.* V. Arabicas, *Briſſ.* Creſted black vulture, *Edwards.*

The MALTESE VULTURE.—Body brown; quill-feathers blackiſh-brown, the primary white, ſpotted with brown at the tips; tail-feathers grey brown; legs naked. Head brown, covered with down; feathers on the neck narrow; bill black, feet yellowiſh, claws duſky. Inhabits Europe, particularly Malta; ſize of a pheaſant.—Vultur fuſcus, *Gmel.* and *Briſſ.* Vautour de Malte, *Buff.*

The BLACK VULTURE.—Body black; quill and tail-feathers brown; feathers of the legs black. Head downy; upper part of the neck naked; orbits and legs down to the toes covered with white down; tongue ſmooth, not ſerrate; bill ſtraight at the root; noſtrils round. Inhabits Egypt and Sardinia; large.—Vultur niger, *Gmel. Briſſ.* and *Ray.* Black vulture, *Will.* and *Lath.*

The WHITE-HEADED VULTURE.—This bird is placed after the vultures by Vaillant, becauſe it is more analagous to them than to any other genus, at leaſt in its habits; for in the form of its beak it differs not only from the vultures, but from all birds of prey. He is of opinion that a diviſion ſhould be made in this genus wherein to place ſuch ſpecies as have the beak thin, weak, and lengthened out, inſtead of hooked. The beak is ſmall for a vulture of this ſize, and a naked fleſh-coloured ſkin covers it for two thirds of its length; the noſtrils lie lengthwiſe in the middle of this ſpace; the tip of the bill bends without

without any notch, and only the tip is horny. The Great Namaquois call it *ouri-gourap*; the Hottentots, *hou-goop*, and the Dutch coloniſts *witte-kraai*; all ſignifying *white raven*. Vaillant calls it by the firſt of theſe names. Though this bird is not really a raven, its walk, its flight, and its manner of living, are ſimilar. In the cantons they inhabit, there is never a horde of ſavages but has a couple of them as it were domeſticated: they perch on the low buſhes, or on the incloſures where the cattle are kept; and the ſavages never hurt them, becauſe they devour filth and offal. Theſe birds do not go in flocks, like the vultures and ravens: when attracted by the ſmell of a carcaſe, eight or ten may ſometimes be ſeen together, but otherwiſe rarely more than two. The male and female never quit each other; they build their neſt in rocks; and are ſaid by the Hottentots to lay three and even four eggs, but this Vaillant does not affirm from his own knowledge; and upon every occaſion, in the work we are quoting, he is particular in diſtinguiſhing what he aſſerts from his own obſervation from what was told him by others. He obſerved this ſpecies in the barren lands of Karow and Camdeboo; alſo, but rarely, among the Auteniquois and about the Cape; more commonly among the Little Namaquois; and in ſtill greater numbers about the Orange River, and in the country of the Great Namaquois. Theſe birds are not at all ſhy; the hunter may eaſily approach them; but it takes a large bullet to kill one on the ſpot. Vaillant ſays they always attended him when he was encamped in the country of the Namaquois, and would hardly be driven away, ſo little did they know of the enmity of man. He had fired ſeveral times at the ſame bird, and even wounded it ſeverely, but ſtill it returned, and endeavoured to get at the meat he was drying or ſmoking out of doors. For want of fleſh they devour lizards and ſnakes, and even the worms and

inſects

inſects that are among the dung of the cattle, and ſometimes the dung itſelf for want of better food.

This bird is ſtouter than the largeſt buzzard. The tail is always worn at the end, from its trailing on the ground, or being thruſt into holes in the rocks, where they rooſt at night. It is certainly the little vulture or Norway vulture, of Buffon, the white-headed vulture of Briſſon, and the *leucocephalus* of Gmelin; but theſe names are improper, ſays Vaillant, becauſe there are ſmaller vultures, and becauſe the head really is not white. Buffon's figure of the bird is a very bad one, and his deſcription (as we have often had occaſion to remark) does not agree with the plate. The Egyptian ſacre of Belon is the ſame ſpecies alſo, though by Gmelin regarded as a variety of the *percnopterus;* ſo that, if the ſpecimen (now in the national cabinet at Paris) from which Buffon took the drawing for his 449th plate was really killed in Norway, this bird inhabits a great extent of country: it is probably ſpread all over ſouthern Africa, as Vaillant obſerved it from the Cape quite to the tropic, where it was more common than elſewhere.

The forehead, round the eyes, and the cheeks as far as the ears, are bare, and of a ſaffron colour, which colour is brighter in that part of the beak where the noſtrils lie; the throat is furniſhed with a fine down, leaving the ſkin partly viſible, which is yellowiſh, wrinkled, and capable of great extenſion. The top of the head and all the neck are covered with long narrow feathers, ſtanding apart, eſpecially behind and at the ſides. The prevailing colour is white ſhaded with fawn-colour on the upper part of the body and ſcapulars; the large wing-quills are black; the middle ones are fawn-colour outwardly, blackiſh in thoſe parts which are concealed when the wing is at reſt. The tail is reddiſh white; and tapering, the middle quills being the longeſt, thoſe on each ſide ſhorter and ſhorter. The tip of the bill and the

the nails are blackiſh; the feet yelloviſh brown; the crop is very prominent when full; it is bare of feathers, and of a yellow colour. The female differs from the male in being ſomewhat larger; the head and the origin of the bill are not ſo red, but rather more incline to yellow. When young, there is a grey on thoſe parts of the head and throat which afterwards become bald. In November, December, and January, which are the ſeaſon of love, the red on the bill is brighter than during the reſt of the year. Vaillant ſuppoſes the brown vulture of Briſſon, and the Malteſe vulture of Buffon, to be varieties of this.—Vultur leucocephalus, *Gmel.* and *Briſſ.* Vautour de Norvege, and Petit vautour, *Buff.* Egyptian facre, *Belon.* White vulture, *Will.* and *Ray.* Golden eagle, or father long-beard, *Bruce.* Ourigourap, *Vaillant*, N° 14.

The Bearded Vulture.—Body darkeſt brown, beneath white inclining to brown; feet woolly; toes lead-colour, claws brown. Bill purpliſh fleſh-colour; lower mandible bearded with a tuft of black feathers; eyebrows red; irids yellow; head moſtly covered with white down; front, cheeks, and area of the eyes, black; neck covered with long, narrow, whitiſh feathers. Inhabits Africa, eſpecially the coaſt of Barbary.—Vultur barbarus, *Gmel.* V. barbatus, *Briſſ.* Bearded vulture, *Edwards* and *Latham.*

The Pondicherry Vulture.—Body black; head and neck ſcarlet, nakediſh, with fleſhy caruncles on the ſides of the neck. Inhabits India; ſize of a gooſe; bill black; feet yellow.—This and the two following are added by *Turton.*

The Indian Vulture.—Body brown with pale ſtripes above; head and neck naked, reddiſh; quill and tail-feathers black. Head downy; bill black; neck naked; breaſt covered with truncate feathers. Inhabits India; ſize of the laſt: very voracious, feeds on fiſh and carrion.—Vultur Indicus, *Turton.*

The

The COROMANDEL VULTURE. — Body white; quill-feathers black; bill and legs grey. Inhabits India; ſize of a turkey; irids red.—Vultur Gingini-anus, *Turton's Linn.*—The remaining are new ſpecies from Vaillant.

The RED-HEADED VULTURE. — This ſpecies, which Vaillant calls *oricou*, is ſtouter than the largeſt vultures of Europe. Its wings meaſure more than ten feet from tip to tip when extended. It has a ſingular mark of diſtinction, a membrane, four lines thick, which goes round the front part of the ear, and then falls ſtraight down upon the neck, about four or five inches in length; this organ doubtleſs aſſiſts the faculty of hearing. The head and half the neck are bare, and fleſh-coloured; but this colour inclines to violet towards the bill, and to white at the ears: a few ſhort hairs are ſcattered here and there upon this bald part. The throat is black, with ſtiff hairs of the ſame colour. The feathers of the upper ſurface of the body, wings, and tail, are dark brown, but lighter at the edges. The feathers of the back of the neck are curled, forming a kind of ruff into which the bird can ſink all the bare part of the neck; this attitude it generally takes while digeſting its food. The crop, which is very prominent, is covered with a fine ſoft ſhining down, not unlike the hair of quadrupeds. From the breaſt to the tail, the body is covered with long narrow feathers, bending like the blade of a hanger; their colour is light brown edged with light grey; the thighs and halfway the tarſes are covered with a fine white down, inclining to fawn-colour behind; the ſame down covers the under parts of the body, and appears through the breaſt-feathers, and on the ſides of the neck. The tail is taper, and ſeems always worn at the tip; for the rocky places they frequent, in the holes of which they thruſt themſelves to rooſt, rub away the feathers at the end of the tail; while the eagles, who generally

perch on trees, preſerve their tails entire; beſides, the vultures rub their tail againſt the ground, for they are not able to fly up ſuddenly, but after running a few paces, and by a ſtrong contraction of their muſcles. The baſe of the bill and the ſkin which ſurrounds it are of a yellow horn-colour; the feet and claws are very ſtrong, and covered with great brown ſcales; the nails are broad, but not much crooked; they are horn-colour, as well as the end of the bill; this bird has long black eye-laſhes; the iris is maroon-colour.

This ſpecies, like moſt of the genus, haunts mountainous and rocky places; in the caverns of which theſe birds have their neſts; there they ſpend the night, and the reſt of the day which is not devoted to procuring food. At ſunriſe they are ſeen in great numbers, perched at the entrance of their holes in the rocks, and ſometimes a long chain of mountains is ſpread with them through its whole extent, ſo very numerous are they, according to Vaillant. Though their flight is not ſudden, as obſerved before, it is very ſtrong; they riſe prodigiouſly high, even beyond the reach of human ſight. And it is inconceivable how theſe birds, while imperceptible to us, can obſerve what paſſes upon the ground, mark out the objects of their prey, and dart down in numbers the moment an animal is dead. If a hunter kills a beaſt which he cannot carry away, let him quit it but for a few minutes, and he will ſee no more of it, but will find a flock of vultures in the place where juſt before not one was to be ſeen. Different ſpecies of vultures join together upon theſe occaſions. "The firſt time I was ſerved this trick," ſays Vaillant, "was when I was very ſhort of proviſions; ſo that I do not eaſily forget the leſſon it taught me. I had killed three zebras; ſatisfied with my ſport, I returned to my camp, which was about a league diſtant, to get a cart to bring them home. My Hottentots told me it would be of no uſe to return, as the

zebras

zebras would be devoured before we could get back. We ſet out, however; but ſoon ſaw at a diſtance the air darkened with flights of vultures: when we arrived, the place was full of them; nothing remained of the zebras but the large bones; yet vultures were ſtill coming from different quarters; we counted at leaſt a thouſand.—Curious to obſerve how ſuch a number of vultures could be collected," continues our author, "I hid myſelf one day in a thicket, after having killed a large antelope, which I left extended on the place. Preſently came ſome ravens, hovering over the body, and croaking a good deal; in a few minutes more came ſome buzzards and kites; and ſoon after, looking upwards, I ſaw birds at a prodigious height, as if coming out from hiding-places in the ſky; they wheeled continually round in their deſcent, and I ſoon knew them to be vultures. They preſently fell upon the dead animal; but I appeared, and interrupted their meal; they heavily took to flight, and joined their comrades, who were coming from all quarters to the ſame place; but my preſence ſoon made them diſappear."

A traveller may ſometimes be uſefully warned, by the approach of a large flock of vultures, that a lion, tiger, or hyena, is near, and has killed ſome large beaſt; for upon ſuch occaſions they aſſemble quickly; but they do not preſume upon their numbers or their ſtrength to diſpute the prey; they wait at a reſpectful diſtance till the lion, &c. has finiſhed his repaſt; when he retires, they come in and devour what he leaves. Hence the Hottentots and coloniſts at the Cape never leave a piece of game which they cannot carry off without burying it or covering it over with branches and leaves; but even this does not always ſave it; for the vultures, directed and aſſiſted by the ravens, ſometimes dig up and devour it.

The Dutch coloniſts call this ſpecies *ſwarte aas vogel*, dark carrion-bird. It is never found about the Cape,

but in the interior ſettlements, about Orange-river, South Africa, among the Great Namaquois, who call it *ghaip*. It neſtles in holes in the rocks; the females lay two white eggs, rarely three. They pair in October, and by January all the young are hatched. As they are gregarious, a ſingle rock contains ſometimes as many neſts as there are holes to admit them. Vultures never make their neſt in trees in Africa; and Vaillant is of opinion, that this is the caſe every where elſe. They are not hoſtile to each other, for three neſts have been ſeen near together in the ſame cavern. While the female ſits, the male watches at the mouth of the hole; yet Vaillant ſometimes took the pains, with the help of his Hottentots, to drive the old ones away, in order to examine the eggs. The neſt itſelf is a filthy hole, of a moſt intolerable ſmell; the entrance is lined with dung, which is moſtly ſoft from the water which oozes continually through the rocks, ſo that a man is always in danger of ſlipping from the rock into thoſe frightful precipices over which theſe birds chooſe in preference to build. The eggs are not ſo bad but they may be eaten. When firſt hatched, the young are covered with a whitiſh down; when ready to quit the neſt, the plumage is a light brown, the feathers having a reddiſh tinge at their edges; the breaſt and belly feathers are not then curved into the ſhape of a ſabre as in the full-grown bird; the head and neck are entirely covered with a fine thick down, and the ears are ſcarcely viſible; which might lead a ſuperficial obſerver to miſtake it for an eagle, or rather for a vulture of a different ſpecies; but a vulture may always be diſtinguiſhed from an eagle by the claws, a much better diſtinction than the baldneſs of the head, for in the young vulture the head is not bald; it is at leaſt covered with down; for want of attending to this, young vultures have been conſtantly ranked by naturaliſts among the eagles.—Oricou, *Vaillant*, N° 9.

The

The CHAUGOUN VULTURE.—Vaillant received this bird from Bengal, and has preſerved the Indian name. It is about the ſize of a young turkey-hen. The beak is almoſt entirely a black horn-colour, the upper mandible only being yellowiſh where it ſwells out. The noſtrils are long, lying acroſs, and occupying the whole breadth of the baſe of the bill, which is encloſed in a black ſkin. On the front of the neck are a few ſcattered hairs, leaving the ſkin conſtantly viſible, which appears to have been bluiſh, but from a dried ſpecimen it was not poſſible to determine exactly what might have been the colour when the animal was alive. The crop is prominent, and covered with fine ſilky feathers, of a dark brown colour, which indeed is the general tint of the plumage. But this dull uniform colour is ſomewhat relieved by a white line which runs longitudinally juſt in the middle of each feather on the under part of the body. There is a large white ſpot on each ſide the breaſt, but theſe are concealed when the wings are folded up. The inner part of the thighs is covered with a white down, which prevails all over the under-plumage, and riſes to the crop. The head and upper part of the neck behind are entirely covered with ſhining hairs of a dirty white colour; lower appears a cottony down of a white colour, which is loſt in a thick ruff of the ſame colour. The tail and large wing-quills are blackiſh, the middle are a red-brown at their outer edges. The wings, when folded in, did not extend beyond the tail; and the tail was worn at the end. The nails are black, and the feet are covered with ſcales of a yellowiſh grey colour. The middle toe is nearly twice as long as the ſide ones.—Chaugoun, *Vaillant*, N° 11.

The CHINCOU VULTURE.—This large and ſcarce ſpecies is kept alive in the beautiful managerie of M. Ameſhoff at his ſeat near Amſterdam. Not knowing the name it bears in China, which is affirmed to be

be its native place, Vaillant beſtowed on it the name we have preſerved. We muſt refer the reader to Vaillant's Hiſtory of African birds, for a deſcription of Ameſhoff's collection of living birds, which is the moſt curious perhaps in the world; vol. i. p. 53, n.

This bird is about the ſize of the African ſpecies called *oricou;* but is ſo peculiarly marked, that it cannot be confounded with any ſpecies hitherto deſcribed. There is a downy tuft of a light brown colour at the top of the hinder part of the head, ſhaped like what we call a ſwan-down puff. The head, cheeks, and throat, are covered with a black down; the iris of the eye is white. Round the neck is a collar of long, thin, looſe feathers; the bare part of the neck between this collar and the cheeks, is of a dirty white; it appears like a white cravat with a ruff underneath it. The reſt of the neck is bare of feathers before; the ſkin is wrinkled, and of a light-blue colour. The crop is very prominent, like a bladder or a large egg when full; but, when empty, it ſhrinks up, and diſappears between two flaps of feathers which ariſe from the ſides of the neck, and naturally meet here, but are thrown back by degrees as the craw or crop becomes diſtended. The feet and toes are whitiſh; the nails like horn, as is the tip of the bill, which is bluiſh white at its origin, and is pretty thick in that part, but diminiſhes inſenſibly to the tip. When the bird is full, and ſits ruminating or digeſting, the head ſinks entirely between the ſhoulders; the beak lies at length upon the craw; the bare parts of the neck are no longer ſeen; the ruff ſurrounds the head, like a ſun with diverging rays; and the wings hang down and hide the feet. The plumage then is ſo briſtly and rough, that the whole looks rather like a ſhapeleſs maſs of feathers than a bird.

The prevailing colour is brown, darker on the wing and tail quills and on the belly. It devoured raw

raw fleſh with greedineſs. Its wings appeared to extend about nine feet from tip to tip; but Vaillant was diſſuaded from going into the cage to meaſure them; indeed the appearance of the claws would have deterred moſt people. — Chincou, *Vaillant*, N° 12.

FALCO, THE EAGLE, FALCON, &c.

I. *Bill hooked only at the point; bearded at the baſe with extended briſtles.*

This diviſion Gmelin calls GYPAETI, obſerving that the ſpecies form a connecting link between the Vultures and the Eagles and Falcons. They prefer fleſh, and will feed upon ſheep, hares, ſerpents, fiſh, &c. even in a ſtate of putridity, while the eagles and hawks prefer birds, and refuſe carrion unleſs very hungry.

The SERPENT-EATER.—Specific character, body black, hind head creſted; tail-feathers white at the tips, the two middle ones longeſt; legs very long.

This ſpecies has hitherto been conſidered as a Vulture; and we have accordingly deſcribed it under the name of the Sagittarius, or Secretary Vulture, vol. iv. p. 76. But, being now better known, it is placed by Gmelin firſt among the Eagles, or rather between the Vultures and Eagles. As it is an African ſpecies, the following particulars are added from Vaillant.

This rapacious animal is not only a deſtroyer of ſerpents, and of all oviparous quadrupeds, but alſo a complete warlike bird, voracious and intrepid; in a word, a real bird of prey, armed with a ſtrong hooked bill, a heavy robuſt body, and provided with moſt deſtructive wings, ſerving to ſtrike down and murder its prey, inſtead of ſharp ſtrong claws, of which it could make no uſe. The ſerpent-eater therefore reſembles the reſt of the rapacious tribe in the ſhape of the bill, the make of the body, and by its ſanguinary and ferocious diſpoſition; but it is modified

dified in a manner proper for deſtroying and feeding upon ſerpents. By continually running on the ground, its nails are blunted; its flight is heavy, and indeed almoſt unneceſſary from its mode of living; for it may be regarded as a terreſtrial bird of prey, deſigned by nature to clear the deſerts of Africa from the moſt dangerous ſnakes and vipers, or at leaſt to leſſen their numbers; doubtleſs to keep up a proper balance between thoſe formidable reptiles and other animals; a balance ſo neceſſary to be preſerved, as otherwiſe the earth would quickly be inhabited only by noxious beings.

The ſerpent-eater has long thighs and legs; theſe raiſe his body high from the ground, and more eaſily protect him from the bite of thoſe enemies with whom he ſo often engages in combat. His ſhort toes and blunt nails are not calculated for ſeizing and carrying off prey; the feet are only uſeful in purſuing the ſerpent, or in avoiding its bite by ſudden and repeated leaps or ſprings. But, inſtead of claws, ſo uſeful to birds of prey, the wings are furniſhed with large bony prominences, which, though blunt and rounded, are perfectly ſuited to the purpoſes of offence and defence. Thus armed, this bird will attack an enemy no leſs formidable than the Coluber atrox, or fierce viper of Africa; (ſee vol. xii. p. 613.) If it retreats, the bird follows, ſeeming to fly as it ſkims the ground; yet it does not expand its wings as the oſtrich is ſaid to do, but reſerves them for the fight. The ſerpent, if overtaken at a diſtance from his hole, ſtops, raiſes its lofty creſt, and endeavours to intimidate the bird by preſenting its forked tongue, and ſending forth a ſharp hiſs. Then the bird, dropping one of his wings, trails it before him, covering with it, as with a ſhield, his legs and the lower part of his body. The ſerpent, upon being attacked, darts forward; the bird bounds up, ſtrikes, retires, gets behind, jumps about in all directions in a manner that would appear ludi-

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The Serpent Eater.

London, Published as the Act directs Oct.r 8.1803 by J. Wilkes.

crous to a ſpectator; ſtill returning to the charge, he preſents the extremity of his wing to the venomous tooth of his adverſary; and, while the ſerpent vainly endeavours to injure that bony prominence, the bird keeps battering him with the other wing. At length, ſtunned by a blow, the reptile ſtaggers, and rolls on the ground, whence the bird toſſes him up ſeveral times, till thoroughly exhauſted, and then diſpatches him with his bill, and ſwallows him whole, unleſs too large, in which caſe the bird tears him piecemeal, holding him beneath his claws. Sharp claws would not avail againſt the ſlippery ſcales and plated armour of theſe ſerpents; the bony excreſcences on the wings are much more formidable; for repeated ſtrokes never fail to ſtun the ſerpent; and ſometimes the vertebræ are broken by the firſt blow.

This bird feeds alſo upon lizards, which make little reſiſtance; and upon ſmall tortoiſes, which he ſwallows whole, after breaking the ſhell and the ſkull-bone; and the young make great havock among graſshoppers and other inſects. In a domeſtic ſtate, the ſerpent-eater may be fed upon any kind of meat, raw or dreſſed, and upon fiſh: he ſwallows young fowls and ſmall birds entire, feathers and all, taking them in head-foremoſt; but in a ſtate of nature Vaillant ſuppoſes it does not attack birds. That eminent ornithologiſt ſhot a male, which had in its crop twenty-one little tortoiſes, whole, ſeveral of them about two inches in diameter, eleven lizards ſeven or eight inches long, and three ſerpents an inch thick and as long as a man's arm; beſides a quantity of graſshoppers and other inſects; many of them ſo perfect and entire that Vaillant preſerved them in his collection: the ſerpents, lizards, and tortoiſes, had each a hole in the head. In the ſtomach of this bird he found a ball as large as a gooſe's egg, which conſiſted of the bones of ſerpents and lizards, the ſhells of tortoiſes, wings and legs of graſshoppers, and the elytra of

ſcarabæi: theſe indigeſtible materials the bird afterwards ejects by the bill, as moſt of the rapacious tribes do.

The ſeaſon of love is about the month of July; at this time their arms are turned againſt each other; they have dreadful battles for the favours of the female, who always yields to the ſtrongeſt. Their neſt is flat, like thoſe of all eagles, and placed on the higheſt and moſt thickſet or buſhy tree in the quarter they chooſe for their domain: it is lined with wool and feathers, and is at leaſt three feet in diameter; they bend the twigs or branches of the tree ſo as to make them ſerve as a foundation for the neſt; and theſe, ſhooting up and riſing all round it, totally conceal it from view, and make it every way ſecure. This mode of neſting is obſerved in the environs of the Cape, and in thoſe barren and ſcorched plains where no large trees are to be found; but about the coaſt of Natal, where this ſpecies is alſo found, they build on the top of the higheſt trees. One neſt ſerves the ſame pair for ſeveral years; and one pair reigns alone over a large extent of country. The female lays two, often three, white eggs, dotted with rufous, and of the ſize of gooſe-eggs, but rounder. The young take a conſiderable time before they can ſhift for themſelves: their long weak legs are the cauſe of this, ſo that they ſeem as it were to have attained their full growth before they quit the neſt, which is not till they are four or five months old; previous to that time they walk with their legs bent under them, and make a very awkward appearance. But, when at a perfect growth, this bird walks firmly, with a noble air and graceful motions, generally with a ſlow agreeable pace, and yet upon occaſion it can run extremely ſwift. When purſued, it endeavours to eſcape by running rather than by flying, and in that caſe takes enormous ſtrides. To force it to take wing, it muſt either be ſurpriſed ſuddenly, or followed on horſe-

back

back at full gallop; but even then it does not riſe to any height, but alights as ſoon as the danger ſeems paſt, and takes to running again.

The ſerpent-eater is very ſhy and cunning; it is difficult to get near enough to take aim; and, as it is rarely met with but in the moſt barren and naked plains, ſuch being the haunts of the animals it preys upon, it is there pretty ſecure, being able to diſcern an enemy at a conſiderable diſtance. But, as the bird generally returns to the ſame places at ſtated times, the only mode for the hunter or fowler is to hide himſelf before day-light in a buſh near to which he has ſeen one of them the day before, and to wait with patience its return to the ſpot: he muſt be careful to make no ruſtling noiſe, to be totally concealed, and to rub his gun-barrel with warm blood to prevent its ſhining: this is the method uſed at the Cape, and is preferable, in Vaillant's eſtimation, to the European method of painting them.

The male is conſtant to one female, and they are generally ſeen together. When caught young, they are eaſily tamed: when properly fed, they may be truſted among poultry; but, if hunger pinches, they take care to help themſelves. Vaillant ſays they are fond of peace; for, in caſe of any battle in the farm-yard, the ſerpent-eater runs and parts the combatants: and many perſons (he adds) at the Cape bring up theſe birds in their farms, both to maintain order, and to devour the lizards, ſerpents, and rats, which are ſo apt to deſtroy chickens and eggs.

This ſpecies is found in all the barren tracts about the Cape of Good Hope, eſpecially in Swartland; it is pretty common on the eaſtern coaſt, and as far as Caffraria; much leſs ſo on the weſt, and towards the Namaquois country. It is found alſo in the Philippine iſles.

Several naturaliſts have ſpoken of this deſtroyer of ſerpents; but few appear to have examined it accu-

rately, till Vaillant deſcribed it. Buffon gives it the dimenſions of a large crane; but it is really not ſo large as the common European crane, being only three feet three inches high at the utmoſt. Kolbe has confounded it with the *pelican*; for the name of *ſlang-vreeter*, ſerpent-eater, which he applies to the pelican, is the only appellation by which this bird is known, both by the Hottentots and the Dutch coloniſts. The name of *ſecretaire*, or ſecretary, was afterwards given it by the Dutch, from comparing it with the office clerks, who have a habit of ſticking a pen behind their ear, to which this bird's tuft bears ſome reſemblance. Kolbe gives it a forked tail; but the tail is tapering, (what the French call *etagée;*) the two middle feathers being twice as long as thoſe next to them, and they trail on the ground when the bird lets them droop. The eye is large, grey, with black eye-brows. The mouth is large, the mandibles extending beyond the eyes; the throat is thick, and capable of great extenſion by the ſwelling out of the ſkin of the neck; the crop is very large, and capable of containing a vaſt quantity of food. The plumage of the male, in his perfect ſtate, is bluiſh grey on the head, neck, breaſt, and mantle, ſhaded more or leſs with rufous brown on the wing-coverts; but the large quills are black. The throat, and the plumage of the ſternum, are white; under the tail white ſoiled with rufous; the lower belly is black, mottled or ſtriped with white and red; the thighs are covered with black feathers faintly ſtreaked with brown. The baſe of the bill and the naked ſkin about the eye are yellow, but of a ſtronger orange-colour over the eye; the bill is blackiſh, as are the nails, which are ſhort and blunt; the toes are very thick, both they and the legs are covered with broad ſcales of a yellowiſh brown. The feathers of the tail are partly black, but inclined to grey as they lengthen, and are all white at the tips: the two middle ones, which are by far

J. Pass sculp.

The Griffard Eagle, and the Boatman.

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far the longeſt, are of a light blue clouded with brown towards the end. The creſt conſiſts of ten very diſtinct feathers; they riſe in pairs, the ſhorteſt on the upper part of the neck, the longer ones lower down: they occupy a ſpace of more than four inches: the large ones are black moſtly on their outward extremities; the reſt are grey and black intermixed: they are narrow at their origin, but ſpread at length into the form of a club: they are agitated by every breath of wind, or the leaſt motion of the animal, who can alſo erect them at pleaſure.

The female differs from the male by her grey colour being leſs ſhaded with brown; her creſt is ſhorter, and lighter in colour; her lower belly is white; brown and white ſtreaks are more viſible on the plumage of the thighs; and the two mid-quills of the tail are not ſo long. In the young bird, the grey is clouded with a ſtrong tint of rufous; each leg-feather is edged with white; and the lower belly is entirely white. The creſt is ſhort, and entirely of a reddiſh grey; the two middle tail-quills are no longer than the others. The bony prominences of the wings are not then formed; even in the full-grown bird we muſt lift up the wing in order to diſcover them; for in fact they are only apophyſes or proceſſes of the metacarpus.—Falco ſerpentarius, *Gmel.* Sagittarius, *Voſmaer.* Secretaire, *Sonn.* Secretary, or Sagittarius, *Penn.* and *Lath.* Meſſager du Cap de Bonne Eſperance, *Buffon.* Mangeur de ſerpens, *Vaillant*, N° 25. Serpent eater, *Ency. Lond.* vii. 171. Serpentarius (a new genus) Africanus, *Shaw's Gen. Zool.* vol. vii.

The GRIFFARD EAGLE.—This African ſpecies, which Vaillant particularly deſcribes, is nearly as large as the golden eagle, and the legs longer. Its food is gazelles and hares, which it kills and carries off with great addreſs; and it drives all other birds of prey from its haunts. Sometimes a flight of ravens

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and vultures will endeavour to carry off a beaſt that the griffard has killed; but the fierce and commanding aſpect of this bird, when perched upon its booty, keeps whole legions of inferior robbers at bay.

The griffard is generally accompanied by his female; they rarely ſeparate, and moſtly preſerve the ſame haunts, which are pretty extenſive. They place their aerie, or neſt, on the top of the higheſt trees, or in clefts of the moſt inacceſſible rocks; the neſt is not hollow, but flat, and ſtrong enough to ſupport the weight of a man. It ſerves the ſame pair for many years; being made of very ſtrong ſticks, laid acroſs a forked branch, and interwoven every way with twigs which bind them faſt together, and form the ground-work; above this is a layer of underwood, moſs, dried leaves, heath, ruſhes, &c. On this reſts a third ſtratum, compoſed of ſmall pieces of dried wood; and on this, without any mixture of down or feathers, the female lays her eggs. The neſt, thus conſtructed, may be four or five feet in diameter, and two in thickneſs, but of an irregular form. By the heaps of bones in various ſtates of decay at the foot of a tree containing one of theſe neſts, and from the ſeveral layers of external ſurfaces, ſome judgement may be formed of the age of it, and how often it has been refitted for a freſh brood. When a convenient tree does not offer, the neſt is placed among the rocks, and faſhioned like the former, except that the foundation is not then neceſſary, and the bed of moſs is laid upon the rock itſelf; but the eggs are always laid upon wood, never upon any ſoft ſubſtance. But the griffard always prefers, if it can conveniently be had, a high ſolitary tree, whence he may deſcry at a diſtance any approaching danger. Among the rocks, his habitation is more expoſed to the invaſion of ſmall quadrupeds in the abſence of the old ones. The female lays two eggs, which are nearly round, quite white, three inches and ſome lines in diameter.

While

While ſhe is ſitting, the male guards her and brings her food; when the young can be left in the neſt by themſelves, the male and female are fully employed in procuring food for the whole family; they are exceſſively voracious; hence, as ſoon as the young are able to fly well, they are driven away to provide for themſelves. M. Vaillant caught one of theſe alive, having broken his wing by a ſhot: for the firſt three days he was ſulky, and would eat nothink; but, when he once began to feed, there was no ſatisfying his voracity; he was furious at the ſight of fleſh, if he could not immediately get at it; ſwallowed pieces of near a pound at once, and would not refuſe any, though his crop was ſo full that he was forced to diſgorge, but he preſently ſwallowed again what he had thus thrown up. All fleſh was alike to him, even that of other birds of prey; and Vaillant fed him for ſome time upon one of his own ſpecies which he had been diſſecting.

When on the perch, their ſharp piercing cry may be heard at a great diſtance, mixed with hoarſe raucous notes: they fly ſo high, that they are ſometimes heard when they are quite out of ſight, notwithſtanding their ſize. The head of this ſpecies is rounder than that of the golden eagle: for a deſcription and figure of which ſee vol. iv. p. 87. the beak is not ſo ſtrong, and leſs ſwelled at the curve. The feathers of the occiput, being ſomewhat longer than the reſt, form a kind of pendent tuft. The tail is ſquare, that is, the feathers are all of equal length. The legs are covered with feathers quite down to the toes; thoſe on the thighs are ſhort, not forming what in falconry is called breeches. [It may be proper to remark, that writers on natural hiſtory commonly uſe the word *leg* for that part of a bird which is properly the thigh; ſo that, when they ſpeak of the *foot*, they mean what we ſhould call the leg. Buffon uſes the words indiſcriminately for the ſame part, which often

often occaſions obſcurity in his writings.] When the bird is at reſt, the wings reach to the extremity of the tail. The wings of the female meaſure eight feet ſeven inches from tip to tip; of the male, only ſeven feet five inches. The crop is prominent, and covered with a white ſhining down. The bill is blue at its origin, and black at the tip. The toes are covered with ſtrong ſcales of a yellowiſh colour; the nails are nearly black; they are ſo much hooked as to form ſemicircles very nearly; the hinder one is the largeſt; then the middle, one in front. The eye is large; it lies backward in the head, and is partly covered by the upper part of the orbit; the iris is a very bright hazel. The female is nearly one fourth larger than the male; but the colours of the wings are not quite ſo ſtrong.

The griffard is found in the country of the Great Namaquois; Vaillant firſt ſaw them towards the 28th degree of ſouth latitude on the borders of the Rio Grande. He killed both male and female, and each weighed between twenty-five and thirty pounds. He met with them as he advanced towards the tropic, but never in Caffraria; ſo that he thinks their abode may be fixed from the 28th degree of ſouth latitude and the tropic, perhaps as far as the line, and under the torrid zone; in ſhort, in that part of Africa not inhabited by whites. It is very probable that the ſpecies extended formerly as far ſouth as the Cape; but, in proportion as the coloniſts cultivated the earth and penetrated into the deſert, theſe birds, as well as the wild beaſts, requiring a great extent of country to furniſh them with prey, have been obliged to retire farther into the interior, to avoid a more potent deſtroyer than themſelves, civilized man.

A ſhort deſcription of the colours of this ſpecies will ſuffice to diſtinguiſh it from the other eagles. All the under plumage is white. The top of the head, back, and ſides of the neck, have feathers white at their

their origin and dark grey at the tips; the mixture of the white and grey on the cheeks has an agreeable mottled appearance. The back and tail-coverts are browniſh; ſo is the mantle, but the feathers are ſomewhat lighter round their edges. The large wing-quills are black; the middle ones tranſverſely ſtriped white and black; the laſt are white at the tips. The tail is ſtriped in the ſame manner as the middle wing-quills. —Falco griffardus, *Ency. Lond.* Griffard, *Vaillant*, N° 1.

The CAFFRARIAN EAGLE. — This is another African ſpecies intermediate between the vultures and the eagles: it reſembles the former in the ſhape of the bill and claws, which are leſs arched and not ſo ſharp; but the head is not bare of feathers, nor are the neck-feathers long and unconnected as in the vultures. The caffre is as large as the golden eagle; the bill ſtronger, the claws ſhort, and not ſo much hooked. The wings reach more than eight inches below the tip of the tail, which is generally worn away at the end, from its retiring among the rocks, and alighting oftener on the ground than the eagles in general. The legs quite down to the feet are covered with feathers; the tail is of the taper ſhape, the outer feathers on each ſide being the ſhorteſt. The plumage is entirely black, except a few browniſh reflections on the ſmaller wing-coverts towards the pinions. Its colour, and being found only in Caffraria, made Vaillant call it *Caffre*. The eye is very large, deeply ſunk in the ſocket, and the iris is maroon colour. It is a ſcarce bird: Vaillant ſaw but five in his whole travels, of which he killed two, which were feeding on the remains of a buffalo he had thrown out as a bait for them. On ſkinning them, they exhaled an intolerable ſtench, which proves that they feed on carrion, like the vultures; like them alſo, they are obliged to run a few paces before they can riſe from the ground; but they do not go in flocks; no more

than two (the male and female) being ſeen together. As the two which Vaillant ſhot were both females, he does not deſcribe the difference in plumage between the ſexes; nor does he ſpeak of their habits or neſting from his own knowledge; but the ſavages informed him, that they build in the rocks; that they attack lambs, and devour them on the ſpot, never carrying away any part in their claws, even when they have young ones: in this therefore they reſemble the vultures, which carry food in the crop to their young, and diſgorge it in the neſt; while the eagles generally carry it entire to the airie, and there teach their young to tear and divide it.—Falco Caffre, *Ency. Lond.* Caffre, *Vaillant*, N° 6.

The Boatman.—This has a remarkably ſhort tail; it reaches very little below the rump, the feathers of which more than half cover it; and it is not more than ſix inches long in the whole; ſo that the bird has by no means a graceful look, eſpecially when on the wing; the wings appear very wide, on account of the ſhortneſs of the tail. Its manner of flying might make any one ſuppoſe it a bird that had loſt its tail by accident; for it makes a number of ſtrange motions as if unable to guide itſelf in the air; but Vaillant aſcertained, that the ſhort tail was the ſpecific character; and theſe movements ſeem a playful dalliance by which the male invites his female, who anſwers him in the ſame manner. He hovers round and round, uttering two hoarſe notes, one an octave above the other; ſometimes he ſtops his flight on a ſudden, and deſcends, beating his wings, like the night-hawk, as if one were broken, and he were about to fall to the ground. The female never fails to repeat the ſame actions. The ruſtling of their wings may then be heard at a great diſtance, like a looſe ſail agitated by the wind. This playfulneſs, which Vaillant compares to a boatman plying his oars for the amuſement of the ſpectators, occaſioned

him

him to give it the name of *batelier*. Theſe birds are very common in the Auteniquois country, along the coaſt of Natal, quite to Caffraria. Vaillant ſeldom paſſed a day in that lonely delightful country, as he calls it, without ſeeing ſeveral couples of them, for the male and female are ſeldom apart.

This ſpecies has not the muſcular ſtrength of the preceding. The bill and claws are black; the baſe of the bill yellowiſh; legs and feet yellowiſh brown covered with large ſcales. The head, neck, front, and under parts of the body, are black, which is relieved by the dark red of the back and tail; the ſcapulars are blackiſh, and in particular lights take a bluiſh-grey caſt; the ſmaller wing-coverts are a kind of dun-colour; the inner barbs of the wing-quills are black, but tinged outwardly with light grey; ſo that the wings, when folded-in, appear almoſt entirely of that colour. The eye is dark brown. The female is one fourth larger than the male; but her colours are in general weaker. They neſtle on trees; the eggs are three or four in number, and entirely white, as Vaillant was aſſured by the ſettlers. The young are ſo different from the full-grown bird in colours, that they might be eaſily miſtaken for another ſpecies; but Vaillant ſhot the old ones and three young ones of the ſame family, which put the matter out of doubt; he afterwards ſhot other young ones, though ſomewhat older; and he obſerves, that it is not till the third moult that the boatman receives his full livery. The young ones firſt mentioned had moſt of their plumage of a light brown, or fawn-colour; in thoſe ſomewhat older, the red feathers began already to appear on the tail, and the black ones in other parts; in the young alſo, the origin of the bill is bluiſh, the reſt horn-colour, the feet yellowiſh.

Like the vultures, this bird feeds on all ſorts of carrion; yet will often attack young gazelles, and will watch to ſurpriſe ſick lambs or ſheep; young

oſtriches, if ſeparated by chance from the old ones, likewiſe become his prey. The ſettlers in the Autenniquois country call him *berg-haan*, mountain-cock; but this is a name they give to all birds of prey, particularly eagles. This bird, however, and the preceding, certainly have not the true generic character of the eagles; they ſhould therefore ſtand between the eagles and vultures; but are placed here to avoid the confuſion of new genera, though an entirely new claſſification of birds, Vaillant ſays, is much wanted.

This ſpecies was ſeen moſtly on the ſhores of the Queur-boom river, near Lagoa-bay. They are not gregarious, and are never ſeen in flocks, unleſs other birds of prey have drawn them together to feed upon ſome carcaſe; but, as ſoon as they are gorged, each pair takes the road to its own neſt, carrying food to their young in their crops, not in their claws. They are much attached to their young, and continue to feed them even after they have attained their full ſize.—Falco remex, *Ency. Lond.* Batelier, *Vaillant*, N° 7 & 8.

The Grenada Eagle.—Feathers of the head long, numerous; feet naked; body beneath ſnowy. Back, wings, greater part of the neck and bill, black; head reddiſh-aſh, with a creſted tuft of long feathers, which when irritated are erected; tail long, whitiſh, with tranſverſe black bands; feet and toes yellow; claws black. Inhabits the mountains of New Grenada; two feet and a half high.—Falco Jacquini, *Gmel.* Vultur coronatus, *Jacquin.* Crowned vulture, *Turton.* Grenada eagle, *Ency. Lond.*

The Tawny Eagle.—Body pale tawny; frontlet naked; cere large; feet bluiſh. Bill ſhort, thick, dark; cere briſtly; lower mandible bearded with a tuft of long ſlender feathers; wing-coverts pale tawny mixed with brown; tail dirty-white, with brown bands; claws long, ſlightly curved. Inhabits Falkland iſlands; two feet and a half long.—Falco ambuſtus,

buſtus, *Gmel.* Tawny vulture, *Brown* and *Latham.* Tawny eagle, *Ency. Lond.*

The ANGOLA EAGLE.—Body white; cere bluiſh; orbits naked, crimſon; primary wing-coverts and baſe of the tail black. Bill whitiſh, long, a little hooked; irides ſtraw-colour; tail white at the tip; feet dirty-white, ſcaly; crop protuberant; head and neck clothed with feathers. Inhabits Angola.—Falco Angolenſis, *Gmel.* Angola vulture, *Penn.* Angola eagle, *Ency. Lond.*

The BEARDED EAGLE.—Whitiſh fiery-red; back brown; a black ſtripe above and beneath the eyes. Bill cinereous mixed with reddiſh, ſurrounded at the ſides and underneath with black ſtiff briſtles, ſtraightiſh, hooked at the point, and furrowed on each ſide; noſtrils large, oval, briſtly; quill-feathers twenty-eight, cinereous, ſhining; tail-feathers twelve, cinereous in the middle; feet hairy down to the toes; claws black, ſtrong, a little curved. Inhabits the Alps, and the mountains of Perſia; four feet long; builds in holes of inacceſſible rocks; preys on alpine quadrupeds, and will attack men when aſleep; flies in flocks.—Falco barbatus, *Gmel.* Vultur barbatus, *Linn. Syſt. ed.* xii. V. alpinus, *Briſſ.* Bearded eagle, *Turton.*

The golden vulture of Latham is Gmelin's variety β. of this ſpecies. It differs in being of a leſs fiery red, back black, quill and tail-feathers brown. See vol. iv. p. 79. The variety γ. has the cere bluiſh, legs and body above cheſtnut mixed with white; tail cinereous. Inhabits the mountains of Perſia.—F. magnus, *S. G. Gmelin.*

II. EAGLES. *Feet generally rough; of larger ſize.*

The AMBA EAGLE.—Cere roſy; legs yellow; body ferruginous; head whitiſh and creſted. Inhabits the iſland of Amba. Creſt long, which it is not able to erect; orbits whitiſh; eyes yellow; bill bluiſh; quill-

quill-feathers long, and blackiſh; tail longer than the wings, and blackiſh; tail-coverts white; claws black.—Falco cheriway, *Gmel.* from *Jacquin.* Amba eagle, *Ency. Lond.*

The Chilese Eagle. Cere and feet yellow; body grey; crown creſted. Creſt black, outer feathers longer; bill whitiſh; quill and tail-feathers black at the tip; feet ſcaly, claws ſtrong; male whitiſh, ſpotted with black; female grey. Inhabits Chili; builds in the higheſt trees, making its neſt of twigs, wool, hair, and feathers; lays five eggs; feeds on carrion and domeſtic birds; ſize of a capon.—Falco tharus, *Gmel.* from *Molini.* Chileſe eagle, *Turton.*

The Black Eagle.—Cere yellow; feet yellow, ſomewhat downy; body ruſty-black, with yellow ſtreaks. Bill horn-colour verging to blue; irids cheſtnut; exterior part of the tail white, with blackiſh ſpots, tip whitiſh; legs dirty-white, toes yellow; claws black. Inhabits Europe and North America; two feet ten inches long. Buffon conſidered this as a variety of the ring-tail, or common eagle. See vol. iv. p. 90.—Falco melanætos, *Gmel.* Melanætos, ſeu aquila valeria, *Geſner, Aldrov. Ray, Albin,* and *Briſſ.* Aigle commune, *Buff.* Black eagle, *Will.* and *Latham.*

The German Eagle.—Cere and legs citron-yellow; legs ſomewhat downy; back and breaſt brown; head yellowiſh-white, with brown ſtripes; quill-feathers black. Bill glaucous; noſtrils large, oval, briſtly; tongue fleſhy, the edges horny, hardly cleft at the end; irids hoary-yellow; front with brown lunate marks; legs ſhort, covered with ſoft feathers; feet on the fore-part a little downy; claws black: tail above reddiſh-brown, beneath dirty-white, with ſix black bands. Inhabits Germany; one foot nine inches long.—Falco glaucopis, *Gmel.* from *Merrem. Beytr.* German eagle, *Turton.*

The

The WHITE-BELLIED EAGLE.—White; back, wings, and tail, dark-brown; tip of the tail white; legs yellow; two feet nine inches long; bill large, yellowiſh-brown; claws black. Inhabits North America.—Falco leucogaſter, *Gmel.* White-bellied eagle, *Latham.*

The JAPONESE EAGLE.—Cere duſky; legs yellow; body brown; hardly two feet long. Bill narrow, blue at the baſe, blackiſh at the tip, beneath yellowiſh; front buff; feathers on the reſt of the head and body brown, ferruginous at the tips; throat white ſtreaked with black, ſurrounded with a black ring; feathers of the breaſt and belly yellowiſh-white at the edges; claws large and black. Inhabits Japan. —Falco Japonenſis, *Gmel.* Japoneſe eagle, *Lath.*

The PLAINTIVE EAGLE.—Cere, orbits, and legs, orange; creſt black; breaſt and body above grey waved with black; tail white with tranſverſe black bands; twenty-five inches long; wings brown; tail at the tip, beak and claws, black. Inhabits Terra del Fuego.—Falco plancus, *Gmel.* from *Miller* and *Cook.* Plaintive eagle, *Latham.*

The BLACK-CHEEKED EAGLE.—Cere and downy legs yellow; head, neck, and breaſt, duſky-cinereous; tranſverſe band on the cheeks; back, belly, wings, and tail, black; bill bluiſh. Inhabits North America.—Falco Americanus, *Gmel.* Black-cheeked eagle, *Latham.*

The WHITE EAGLE. Entirely white; ſize of the golden eagle. Inhabits the Alps.—Falco albus, *Gmel.* Aquila alba, *Briſſon.* Aquila alba cygnea, *Klein.* White eagle, *Charlet.*

The LOUISIANIAN WHITE EAGLE.—Body white; wings black at the tips; leſs than the laſt. Inhabits Louiſiana: with its wings the natives adorn the calumet or pipe of peace.—Falco candicans, *Gmel.* White eagle, *Penn.* and *Du Pratz. Louiſ.* Louiſianian white eagle, *Ency. Lond.*

The

The Small Eagle.—Cere and downy legs yellow; body ferruginous, ſpotted with white below the wings. This has been confounded with the ſpotted eagle, vol. iv. p. 93. and the ſynonymes of that are erroneouſly applied to it, p. 95, firſt edit. The irides are yellow; ſecondary tail-coverts white; claws black. Inhabits Europe; ſize of a cock, feeds on ſmall quadrupeds.—Falco nævius, *Gmel.* Aquila nævia, *Briſſ.* Petit aigle, *Buff.* Rough-footed eagle, *Charl.* and *Lath.* Small eagle, *Turton.*

The Statenland Eagle.—Brown; cere yellow; tail black with dirty-whitiſh ſpots on the tip; two feet long; voice like a hen. Inhabits Statenland.—Falco Auſtralis, *Gmel.* Statenland eagle, *Lath.*

The Black-backed Eagle.—Cere and downy legs yellow; head neck, belly, and wing-coverts, ferruginous; throat, breaſt, back, and quill-feathers, black. Size of the golden eagle; bill and claws black; upper half of the tail white, lower black.—Falco niger, *Gmel.* Black-backed eagle, *Brown* and *Latham.*

The White-crowned Eagle.—Cere livid-cinereous; legs pale-whitiſh, a little downy; body clouded brown; crown with a triangular white ſpot; chin white. Larger than the oſprey: tongue rounded; entire; irids grey-brown; wings duſky-black, within white; tail long, ſtiff, equal; claws very large, black. Inhabits Siberia.—Falco leucoryphos, *Gmel.* Aquila leucorypha, *Pallas.* White-crowned eagle, *Latham.*

The Russian Eagle.—Cere yellow; legs downy, with the body duſky-ferruginous; back mixed with white. Two feet three inches long; feeds on mice and ſmall birds. Bill, pupil, claws, and quill-feathers, black; eyes-lids pale blue; irids pale; tail equal; tail-feathers black, with duſky-grey bands, tawny at the tips. Inhabits the deſerts near the Tanais.—Falco Mogilnik, *Gmel.* Aquila Mogilnik, *S. G. Gmel.* Ruſſian eagle, *Latham.*

The

The CRESTED EAGLE.—Head creſted; back, throat, and wings, black; belly white; tail with four parallel cinereous bands. Size of a turkey; lower mandible ſtraight.—Falco criſtatus, *Gmel.* Creſted falcon, *Dillon.* Caracca falcon, *Latham.* Creſted eagle, *Ency. Lond.*

The ROUGH-LEGGED EAGLE.—Cere and downy legs yellow; body black ſpotted with white; tail-feathers white, towards the tip black. Two feet two inches long. Head, neck, and breaſt, yellowiſh-white with oblong brown bands; tail brown, the baſe and tip white. Inhabits Europe and North America.—Falco lagopus, *Gmel.* from *Brunniche.* F. Norwegicus, *Leemius.* Rough-legged falcon, *Penn.* and *Lath.* Rough-legged eagle, *Ency. Lond.*

The GREENLAND EAGLE.—Cere and legs lead-colour; body above browniſh, beneath whitiſh with longitudinal brown ſtreaks. Crown brown, with irregular oblong white ſpots; front whitiſh; cheeks blackiſh; head on the hind-part, and throat, white; breaſt and belly yellowiſh-white, with longitudinal brown ſtripes; back duſky tinged with blue, the ends of the feathers ſprinkled with a few white ſpots; wings beneath variegated black and white; tail above duſky, croſſed with paler bars, underneath whitiſh. Inhabits Greenland: of ſmall ſize; lives on birds. Introduced by Turton.—Falco Grœnlandica, the Greenland eagle, *Turton's Linnæus.*

The FIERCE EAGLE.—Cere green; body above brown; back, belly, and tail-coverts, ſnowy, variegated with cheſtnut ſpots; tail-feathers equal, brown, with four paler bands. Bill leaden-black; eyelids blue; irids yellow; head and neck ferruginous mixed with whitiſh; quill-feathers twenty ſix, black, beneath white, towards the tips grey; tail-feathers twelve, equal, beneath white; claws ſharp. Inhabits Ruſſia: more than two feet long; very rapacious.—Falco ferox, *Gmel.* from *S. G. Gmel.* Fierce eagle, *Latham.*

The JAVAN EAGLE.—Cere and legs yellow; body and tip of the tail white; ſhanks reddiſh mixed with white. Bill yellow. Inhabits the ſea-coaſt of Java: four feet long; feeds on fiſh and carrion.—Falco maritimus, *Gmel.* from *Wurmb apud Lichtenberg Magazin.* Javan eagle, *Turton.*

The EGYPTIAN EAGLE.—Cere and half downy legs yellow; body above cinereous, beneath ferruginous; wings above brown; tail forked, as long as the body, barred with brown. Bill yellow; tail-feathers black towards the tip; wings underneath grey-brown; tail cinereous; claws black. Inhabits Egypt; a foot and a half long.—Falco Ægyptius, *Gmel.* Egyptian eagle, *Turton.*

The EAGLE of the NILE.—Cere and legs yellow; body above reddiſh-brown with tranſverſe black rays; tail forked, as long as the body; wings variegated with brown, grey, white, and a reddiſh hue. Bill black, grey towards the baſe; irids hazel; feathers of the head black in the middle, of the ſides of the head variegated with grey, black, and red; throat grey; upper part of the breaſt reddiſh, with black longitudinal ſpots, reſt of the body beneath grey, tinged with red; legs ſpotted with black. Inhabits Egypt: twelve inches long.—Falco Niloticus, *Turton*, from *Sonnini's Travels*, i. 321.

The NOISY EAGLE.—This ſpecies, called by Vaillant *le vocifer*, is a moſt beautiful bird, diſtinguiſhed from the other eagles not only by variety of colours, but by the elegance of its ſhape and make; it is as big as the oſprey. The front of the body, and the tail, are white; the other parts are reddiſh-brown, mingled with black. The feathers of the head, neck, and ſcapulars, which are white, ſhow their brown edges; a few longitudinal blackiſh ſpots appear on the breaſt. The reſt of the plumage is ferruginous brown and black; the ſmaller wing-coverts are lighter, inclining to ruſt-colour; in this part the ſcapulars are

mixed

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The Noisy Eagle, and the Long-tailed Eagle.

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mixed with black, which agreeably relieves the white that falls gracefully down upon the back. Of the wing-quills, the outer barbs are marbled white and red. The lower part of the back and upper tail-coverts are black mixed with dirty white. The ſkin is viſible between the beak and the eye, being furniſhed only with a few ſcattered hairs; it is of a yellowiſh colour, as well as the baſe of the bill, the feet, and the toes. The iris is reddiſh brown. The feathers of the thighs fall down half an inch upon the legs in front; the nails and bill are of a blue horn-colour. The crop is covered with a long tufted down. The tail is ſomewhat rounded; that is, the outer quills are the ſhorteſt, the reſt are longer in ſucceſſion to the two middle ones, which are the longeſt, and are of equal length. The female has much leſs black in her plumage; the white is not ſo pure; the red not ſo dark. She is larger than the male. The wings when at reſt reach to the end of the tail; when extended, they meaſure eight feet from tip to tip. The young one has cinereous grey in the place of white; at the ſecond moult, the grey remains intermixed with the white; in the third year the bird receives its permanent colours, and the tail is then entirely white.

This ſpecies is found on the ſea-ſhore, and at the mouths of great rivers, all along the eaſt and weſt coaſts of Africa, at leaſt as far as Vaillant travelled in thoſe directions; he never obſerved it in the interior, becauſe, fiſh being its principal food, it frequents thoſe places only which are viſited by the tide; for, moſt of the rivers in Africa being merely torrents ruſhing from the mountains, fiſh is as ſcarce there as it is plenty in thoſe parts bordering on the ſea; yet even in the interior they were ſeen along the whole courſe of the Orange-river and the Rio Grande, becauſe theſe ſtreams are furniſhed with fiſh in every part. This bird, like the oſprey and the bald-buzzard, darts rapidly from a great height into the water

upon a fiſh; ſometimes he ſplaſhes into the waves with a violent noiſe, plunges his whole body under water, and riſes with a large fiſh in his claws; on the neighbouring rocks he devours his prey, or on the trunk of a tree unrooted and thrown up by the waves; and he generally returns to the ſame place for the ſame purpoſe, as may be obſerved by the heaps of heads and bones of fiſhes; among theſe the bones of gazelles are ſometimes ſeen, ſo that beaſts make part of its prey, but not birds; a large kind of lizard, very common in the rivers of Africa, forms an occaſional variety in its food.

The name naturally ariſes from the cuſtom theſe birds have of uttering loud cries with various inflexions of voice; and they reply to each other at a great diſtance, perched on rocks hanging over the ſea, or on a broken tree on the ſands. During theſe noiſy communications, they are ſeen to make violent contortions of the head and neck, doubtleſs from the great exertion required for ſuch a loud converſation. They are eaſily diſcovered by this rough muſic, but it is very difficult to approach one ſo as to take aim. Vaillant, determined to ſpare no pains to poſſeſs ſuch a rare bird, dug a hole, over which he laid a mat, and covered it partly with earth: there he lay three days in ambuſh in ſight of a ſtump of a tree where a couple of theſe birds uſually came to devour their prey; but they did not return till the mould had no longer a freſh appearance, but looked ſun-burnt like the reſt: at length he ſhot the female, but ſhe flew acroſs the Queur-boom river, and Vaillant was nigh being drowned in following her at high water, as may be ſeen at large in his Travels in Africa. The male was killed ſome days after, in ſearch of his female, near the encampment, while feeding on the remains of a buffalo which Vaillant had thrown out to attract carnivorous birds. The noiſy eagle is therefore very ſhy; he takes flight as ſoon as he perceives the hunter

ter at a conſiderable diſtance. He riſes to a prodigious height; and his flight is extremely graceful: while in the air, he frequently utters the notes or ſyllables *ca-hou-cou-cou*. Theſe are uttered ſlowly, the ſecond ſome tones higher than the firſt, and the two laſt ſucceſſively one tone lower. Theſe notes, it is to be obſerved, are only uttered while the bird is on the wing; not when hovering over any thing, but while ſkimming the air with complacency and ſelf-ſatisfaction, and without that exertion and contortion attending the cry we mentioned before: at this time his voice is really pleaſing and ſonorous, without any of that raucous tone which diſtinguiſhes birds of prey in general.

The male and female are generally together, and partake in the moſt friendly manner of each other's prey. Their aerie is on the tops of trees or among rocks; it reſembles that of the griffard eagle, except that it is lined with ſoft ſubſtances, as feathers, wool, &c. on which are laid three white eggs, like a turkey's, but larger. The coloniſts at the Cape call this eagle *groote vis-vanger*, great fiſher-bird; or *witte vis-vanger*, white fiſher-bird. This ſpecies is not common however near the Cape: Vaillant heard its cry but once in Falſe-bay; at ſixty or eighty leagues diſtance they begin to be more plentiful; but they are moſt numerous about Lagoa-bay. It muſt be known alſo in Nigratia; for by the deſcription this muſt be the eagle called Gaby *the nun*: "It has," ſays he, "the habit of a carmelite, with his white ſcapulary." This ſhort notice certainly agrees better with the noiſy eagle than with the bald buzzard, to which it is referred, very injudiciouſly, by Buffon. —Falco ſtridens, the noiſy eagle, *Ency. Lond.* Vociſer, *Vaillant*, N° 4.

The CHINESE EAGLE.—Cere and legs yellow; body above brown, beneath yellowiſh. Bill and claws large, black; irids brown; crown duſky; middle

ſtripe

ſtripe of the wings dark. Inhabits India and China. —Falco Sinenſis, *Gmel.* Chineſe eagle, *Lath.*

The Cheela Eagle.—Head ſlightly creſted; body brown; wing-coverts ſpotted with white; rump white; tail with a broad white band. Bill blue; irids and legs yellow. Inhabits India. This and the following are added by Dr. Turton, from Smellie's edition of Buffon, vol. ix. p. 426.—Falco Cheela, the Cheela eagle, *Turton.*

The Asiatic Eagle.—Legs yellow, half downy; body brown above, white beneath; breaſt ſtreaked; tail-feathers ſilver-grey, external ones with five pale bands. Twenty-one inches long. Bill black; quill-feathers grey with black bands; upper tail-coverts white; legs downy on the fore-part. Inhabits China. —Falco Aſiaticus, the Aſiatic eagle, *Turton.*

The New-Holland Eagle.—Body white; cere and legs yellow; hind claw twice as long as the fore. Twenty inches long; orbits yellow. Inhabits New-Holland. This and the two following are included among the Eagles by Turton, and in the Ency. Lond. though by Gmelin placed among the Falcons.—Falco Novæ Hollandiæ, *Gmel.* New-Holland white eagle, *Latham.* New-Holland eagle, *Turton.*

The Brasilian Eagle.—Cere and legs yellow; body brown; wings blackiſh mixed with cinereous; tail white, the tip black, ſpecked with white. Size of a half-grown duck. Bill thick, black; eyes large. Inhabits Braſil.—Falco uribitinga, *Gmel.* Uribitinga, *Will. Ray*, and *Buff.* Aquila Braſilienſis, *Briſſ.* Braſilian eagle, *Lath.*

The Equinoctial Eagle.—Legs yellow; head, neck, and back, dark-brown; breaſt reddiſh; wing-coverts and ſhoulders chocolate; tail black; the feathers, except the two middle ones, marked with the letter V in white. Twenty-one inches long. Bill pale; claws pale tipt with black. Inhabits Cayenne. —Falco equinoctialis, *Gmel.* Equinoctial eagle, *Latham.*

The

The TUFTED EAGLE.—This is a ſmall ſpecies It has a tuft, long and diſtinct, hanging down five or ſix inches, and ſloping gracefully towards the neck; but it is ſo flexible, that it is agitated by the wind into a thouſand agreeable forms.

This bird has the characteriſtic of the eagles, courage and ſtrength; it lives moſtly by hunting; but for want of living prey, will ſometimes feed on carrion, as all the rapacious birds occaſionally do, of what genus ſoever; for it is a vulgar error, which Vaillant contradicts from his own knowledge, that eagles will not feed upon a dead beaſt, how hungry ſoever they may be. This bird, however, not having the ſtrength requiſite for deſtroying the gazelle, attacks only the ſmaller game, ſuch as hares, ducks, and partridges, which it is very dextrous in ſeizing: its long wings, whoſe tips reach almoſt to the end of the tail, are admirably fitted for darting with vaſt ſwiftneſs upon birds of ſuch rapid flight as the partridges of Africa.

The prevailing colour is dark brown, lighter on the neck and breaſt, darker on the belly and mantle. The breeches, or long feathers of the thighs, are mixed with white, and ſtill more ſo the down which covers the legs quite to the toes. The large wing-quills are a browniſh black, with ſome grey in the middle of their outer barbs; the outer quills of the wings, and thoſe of the tail, are ſhaded with grey and white; but the end of the tail is dark brown, and is ſomewhat rounded. The toes are yellowiſh, the nails a ſhining black; the beak horn-colour; the iris of the eye is yellow, which grows darker with age.

This ſpecies was obſerved by Vaillant in the country of the Auteniquois, and in Caffraria. The neſt is built on trees, and lined with feathers or wool. The female lays two eggs, which are almoſt round, with reddiſh ſpots. She is larger than the male; but her colours are not ſo dark, and her creſt is ſhorter; ſhe has more white about the thighs, and a few white ſpots about

about the eyes and on the top of the head. The male and female are generally ſeen together; and they commonly keep to the ſame haunts. This bird has only a plaintive note, which is ſeldom heard but when in purſuit of the ravens, to which it ſhows no mercy if they come near its neſt. Its moſt deſperate battles are with that ſpecies of *corvus* called the collared raven; which bird, being ſtrong and bold, will ſometimes attack this ſmall eagle, to ſeize its prey; a party of them will even aſſail the neſt, to devour the eggs or young, which the old ones defend with the moſt deſperate reſolution. The young are at firſt covered with a light grey down, which by degrees is ſucceeded by browniſh feathers edged with rufous. Vaillant had an opportunity of examining three different neſts of this ſpecies; he never found more than two young in each, of which one was always a male and the other a female; and the ſexes are eaſily diſtinguiſhed by the difference of ſize even at that age. The tuft, or creſt, begins to appear about the time they quit the neſt.—Falco capillamentus, the tufted eagle, *Ency. Lond.* Huppard, *Vaillant*, N° 2.

The Long-tailed Eagle.—If a commanding courage be one of the attributes which diſtinguiſhes the eagles from other birds, this ſpecies may vie with all others. He tyranniſes over all the great birds that approach his domain; he is a real deſpot, who, availing himſelf of his ſtrength, makes war, and ſpreads devaſtation all around him. He flies with great eaſe and ſwiftneſs; and his long tail is of admirable uſe to him in making thoſe quick turns which are neceſſary for defeating the exertions and ſhiftings of birds who endeavour to eſcape his cruel talons. He is fond of purſuing thoſe birds whoſe flight is the moſt rapid and varied; eſpecially the ring-dove, or wood-pigeon, and particularly that ſpecies called by Vaillant *ramier ramerou*, (ſee Olive Pigeon in this volume,) which is his common food. Falcons, ſparrow-hawks, hobbies, &c.

&c. purſue this ſort of pigeon in Europe, but with little ſucceſs, even when they pounce upon a whole flock of them. Their mode of attack indeed is different: they riſe in the air, and dart ſuddenly at the prey, which if they miſs, the pigeon has time to eſcape before they can recover themſelves. But the long-tailed eagle watches the motions of his prey, and leaves nothing to chance: this pigeon gains the tops of the higheſt trees, and indulges in a manner of flying peculiar to itſelf. If the eagle at this time can get beneath him before he can gain the woods and hide among the thickets, his fate is inevitable: all his turns and rapid movements are of no avail: his enemy rather endeavours to weary him out than to follow him; keeping always below him, ſo as to hinder him from reſting; and the moment he endeavours to perch he is ſure to be taken, for the eagle intercepts him by a ſhorter cut. If the bird drops on the ground, fatigued, the eagle pounces upon him, and ſeizes him inſtantly.

This eagle *plumes* his prey (tears the feathers from the body) before he devours it: and this he does on the low branch of a tree, on a fallen trunk, or on a rock; but never on the ground. This bird is moſtly found in foreſts, preferring places where the trees are largeſt, and ſtand apart; for there, concealed behind a large bough, he watches the motions of the wood-pigeons and the partridges, his favourite prey: he feeds alſo upon a very ſmall kind of gazelle, which frequents the woods, called *nometjes* by the Hottentots. "I long enjoyed the pleaſure," ſays Vaillant, "of obſerving a pair of theſe eagles whoſe neſt was near my camp in the woods of the delightful country of Autenquois. I watched them more than three weeks before I ſhot them: ſeated at the foot of a tree, I ſpent whole mornings in marking their motions and their wiles. As this was the time of ſitting, the neſt was never left by both, and I was ſure to find them every day in the ſame place. If the male had ſeized a prey, he was

preſently followed by a numerous and noiſy flight of ravens, as if to diſpute a ſhare in the booty; but the eagle ſeemed to deſpiſe their croaking and threatening; and the daſtardly troop dare not come very near, but are content to ſeize the morſels which fall from the tree where the eagle devours his prey with the greateſt tranquillity. If a large bird of prey appears, the male eagle purſues it with the moſt bitter animoſity, till he drives it out of his domain. In the mean time the ſmalleſt birds might go with impunity even upon his neſt; and there they were ſecure againſt the attacks of the ſmaller rapacious birds."

The extreme width of this bird's wings appears ſmaller than that of the other eagles, becauſe, as the wings reach only half way the tail, they appear ſhort in proportion to the length of the tail; but, when the ſize of the body is conſidered, the wings are not ſmall. The body of this eagle is not ſo thick as ſome of the ſpecies; but it is longer and ſlimmer, as fitted for the chace: it differs therefore from the ſtouter eagles, as a greyhound from a maſtiff. This ſpecies has a tuft alſo, but not ſo conſpicuous as the preceding, and in the female hardly perceptible. The female is about a third larger than the male, and has more fawn-colour upon the mantle and wing-coverts. The tail is tranſverſely ſtriped with black and white; the outer barbs of the large wing-quills are browniſh; all the part which is concealed when the wings are folded up is ſtriped. The toes are of yellow; the claws, which are very ſtrong, are lead-colour, as is the bill. The iris of the eye is a bright yellow. The plumage in general is white, ſhaded with blackiſh on the mantle; it is ſoft to the touch, whereas the eagles in general are rough. Its cry conſiſts of ſeveral ſharp ſounds following in quick ſucceſſion, ſomething like *cree-quee quee-quee quee.* When on his perch after being gorged, he repeats the ſame notes for hours together, but in accents rather weak for a bird of ſuch a ſize. The long tailed

eagle

eagle builds on the top of the higheſt trees: the male and female ſit by turns; the eggs are two, white, the ſize of a turkey's, but more round. The young one differs little from the full-grown bird; the brown tints are indeed lighter, and all the wing-coverts are edged with reddiſh. It is a general remark, on the young of the rapacious kinds, that the feathers of the mantle are always bordered with reddiſh or fawn-colour. Vaillant met with this ſpecies in the Auteniquois country only.—Falco longicaudus, the long-tailed eagle, *Ency. Lond.* Blanchard, *Vaillant*, N° 3.

The BLACK KITE, as it is called by Buffon, Sibbald, Latham, and others, (ſee vol. iv. p. 127.) is only the common European kite, (p. 125.) before its ſecond moult; this is poſitively aſſerted by Vaillant, who ſays that he brought up ſeveral of them after having killed the old ones; they agreed exactly with the accounts given of the black kite; though he deſires to add, by the bye, that they have not an atom of *black* in their plumage—thus much for names.—Falco ater, *Gmel.* Milvus niger, *Briſſ.* Milan noir, *Buff.* Black gleed, *Sibbald.* Black kite, *Lath.*

The AUSTRIAN KITE.—Cere and legs yellow; legs ſomewhat downy; body above cheſtnut, beneath brick-duſt colour ſpotted with brown; tail forked. Bill yellow, with a black ſpot; angles of the mouth yellow; irids and claws black; palate blue; front and throat white ſpotted with brown; head, breaſt, and wings, cheſtnut; tail ſmall with blackiſh bands; feathers tipt with white. Inhabits the woods of Auſtria; and feeds on birds and bats.—Falco Auſtriacus, *Gmel.* Brauner geyer, *Kramer.* Auſtrian kite, *Latham.*

The BRASIL KITE.—Feet yellow; body tawny varied with white and yellow ſpots; tail variegated with white and brown. Bill and claws long, ſharp, black; eyes and irids yellow; breaſt and belly often white; tail nine inches long. Inhabits Braſil; and is

very deſtructive to poultry.—Falco Braſilienſis, *Gmel.* Caracara, *Buff.* Milvus Braſilienſis, *Ray.* Circus Braſilienſis, *Briſſ.* Braſil kite, *Will.* and *Lath.*

The PARASITE KITE.—The diſtinctive marks of the kite are its forked tail and long wings reaching to the extremity of the tail, which is very long alſo. The tail, however, of this new African ſpecies, is leſs forked than that of the common kite; nor is the bird itſelf larger than the ringtail. The beak differs in being yellow, at the baſe blue. The feet are yellow, and the claws black. The top of the head, neck, ſcapulars, and mantle, are in general tan-colour, but the quill of each feather has a tint of black, and they are light at their edges. The large upper wing-coverts are ſtill lighter on their edges; the larger wing-quills are black, the next lighter, and the ſmalleſt brown. The cheeks and throat are whitiſh; the breaſt of the ſame colour as the mantle. The belly, legs, and under tail-coverts, are of a beautiful cinnamon colour; but the feathers of this bird in general have a black ſtroke along their ſtem. The tail is brown, with tranſverſe ſtripes of a darker colour; and, except the two outer feathers on each ſide, they are light fawn-colour at the ends. The eye is hazel. The female is ſomewhat larger than the male, but her colours are weaker. This ſpecies Vaillant found in all the parts of Africa he viſited; but moſtly in thoſe places where ſmall game abounds, as among the Caffrees and the Great Namaquois. The ſettlers at the Cape called it *kuyken-dief*, which ſignifies fowl-ſtealer; indeed this is the word by which the Dutch deſignate the kite in their own country. It is bolder than the common kite; the ſight of man does not prevent it from attacking domeſtic birds; there is hardly an inhabited ſpot where ſome of theſe depredators do not appear at a certain hour of the day. "During my travels," ſays Vaillant, "when encamped, I was ſure to be attended by ſeveral, who perched on my waggons, and often carried away pieces

I. L. Reinold del.t

J. Pass sculp.t

The Parasite, and furcated Kite of Africa.

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pieces of meat. When driven away by my Hottentots, they would return immediately, and their boldneſs was very troubleſome: even the muſket did not always rid us of theſe gueſts; they would come back, although wounded. Theſe ſmell-feaſts were ſo ſtrongly attracted by our cooking meat in the open air, that they almoſt tore it from our hands."

From a great height theſe kites will plunge into the water after fiſh, of which they are very fond. They hunt all kinds of ſmall animals; and the offal of the large beaſts which Vaillant killed for his own uſe was very acceptable to them. They will eat carrion, and diſpute the poſſeſſion of it with the ravens, their mortal enemies; in vain do theſe laſt fly off with their prey; the kites follow them, and make them ſurrender it. They fight furiouſly with the buzzards, and many other birds of the rapacious kinds. In theſe battles the kite has the advantage of a rapid flight, and vaſt celerity in its movements; it riſes to a prodigious height, and ſometimes, but rarely, utters a piercing cry. "When once," ſays Vaillant, "theſe birds had diſcovered my camp, I was ſure to have them every day at the ſame hour, and their numbers increaſed at each viſit, ſo that we were ſometimes beſet by a dozen at a time. On the borders of the Gamtoos, where I remained a conſiderable time, I remarked one who came regularly every morning at eleven and every afternoon at four. I was ſure it was the ſame, becauſe it wanted four or five of the middle wing-quills, which I had knocked off by a ſhot, and which occaſioned a gap I could not miſtake."

The paraſite builds either on trees or among rocks, but prefers a marſhy ſituation, where it can conſtruct a neſt on a little tuft among reeds. The eggs are ſpotted with red, and four in number. When firſt hatched, the young ones are covered with a greyiſh down; when ready to quit the neſt, the colours are not

not ſo bright as they become afterwards; the tail is then almoſt ſquare: in this reſpect it reſembles the European kite, whoſe tail is very little forked while young.

There is at Senegal a bird of prey which the French call *écouffe*, (kite or puttock;) which, if really a kite, is probably of the ſame ſpecies as the paraſite, ſince the deſcription agrees with it exactly. "All kind of food is agreeable to its devouring maw; fire-arms will not ſcare it away; it will ſnatch dreſſed or raw meat out of the men's hands." This agrees with what Vaillant ſays of the paraſite; and, as this ſpecies is more common among the Great Namaquois and towards the tropic than near the Cape, it is not at all improbable that the ſpecies ſhould exiſt in the ſame latitudes on the other ſide of the line.—Falco paraſiticus, the paraſite kite, *Ency. Lond.* Paraſite, *Vaillant*, N° 22.

The FURCATED KITE of AFRICA.—This may be readily diſtinguiſhed from the *Falco furcatus* of Gmelin, or furcated kite of America, by the tail, which is very little forked, the outer feathers being not above an inch longer than the middle ones, whereas in the F. furcatus, vol. iv. p. 126. there is at leaſt eight inches difference. The male is about the ſize of the female keſtrel; the wing-coverts are black, the front part of the body white; the head, hind part of the neck, and mantle, grey. The wing-quills are aſh-colour tipped with white, as the ſcapulars are with reddiſh fawn-colour. The tail is white beneath, grey ſhaded with ruſous on the upper ſurface, and tipped with white. The eye is crowned with black feathers or hairs, and is of a bright orange-colour; the ſpace between the eye and the noſtrils is ſhaded with black. The claws and the upper mandible are black; the lower mandible black at the extremity, but at the baſe is yellow; the legs and feet are yellow; the feathers of the thighs almoſt cover the legs. When the wings are at reſt, they reach beyond the tip of the tail.

The

The female is ſomewhat larger than the male: her mantle has more of a bluiſh caſt; the wings are not ſo dark, and the white is not ſo clear. They build in the forks of trees; the neſt is ſpacious, lined with moſs and feathers; the eggs are four or five in number, and white. The young, when firſt hatched, are covered with a reddiſh-grey down, which is ſoon replaced by reddiſh feathers on the mantle, neck, and head. The breaſt is then of a beautiful ferruginous red, and all the light parts are ſlightly ſhaded with the ſame tint.

This ſpecies is found almoſt throughout the coaſt of Africa: Vaillant obſerved it from Duyven-hoek to Caffraria, and in the interior at Camdeboo and on the ſhores of Swartkop and Sondag; he ſaw one alſo which had been killed in Barbary. It is generally perched on the top of a tree or high buſh, and may be diſcerned at a great diſtance when the ſun ſhines on its white feathers. Its cry is very piercing, which it repeats almoſt continually, eſpecially when on the wing, which betrays it to the fowler. Vaillant never remarked that it deſtroyed or fed upon ſmall birds, but it would often attack ſhrikes, and even ravens and kites, for the purpoſe of driving them out of the territory it aſſumed to itſelf. It appears to feed only on inſects, or graſshoppers, but is particularly fond of beetles. The nature of its food gives a ſtrong ſmell of muſk to its whole body; "and," ſays Vaillant, "even the remains of theſe birds in my cabinet retain the ſame odour."—Blac, *Vaillant*, N° 37.

FORSKAL'S KITE.—This appears to be preciſely the ſame as the Egyptian Eagle, p. 34, and therefore is ſuppreſſed by Dr. Turton.—Falco Forſkahlii, *Gmel.* and *Ency. Lond.*

The BALD KITE, or BALD BUZZARD, vol. iv. p. 98. Vaillant informs us, that the African bald kite has the ſame proportions and the ſame manners with that of Europe. Its principal food is fiſh, which it marks

marks from a height, and plunges even entirely under water to ſeize. Perched on a tree near ſome river or lake, or on a rock hanging over the ſea, it ſpends whole mornings in watching for fiſh that may be within its reach. Rarely is this ſpecies found in the interior on the barren lands; it frequents only the ſhores of the ſea and of rivers well ſtored with fiſh. They fly to a vaſt height, and utter a piercing cry in their flight. Their ſight muſt be very ſtrong: they dart as it were from the clouds upon a fiſh on the ſurface of the water, and will carry off a pretty large one. This bird has an inſipid fiſhy taſte, which points out its food; and its fat is of ſuch an oily nature, that there is no preſerving the bird's plumage from its effects: Vaillant prepared two with the greateſt care; but after a time, the fat ſpread among the plumage as if every feather had been ſoaked in oil.

This ſpecies is the ſize of the European bald buzzard; the plumage is rough, like the Falco cyaneus, or hen-harrier, eſpecially on the belly. The head, neck, and all the interior part of the body, is white; but the edges of the feathers on the head and back of the neck are browniſh; the mantle and ſmaller wing-coverts are light brown, as is the tail, which is white however at the extremity. The large wing-quills are blackiſh; the middle ones have their outer barbs of the ſame colour as the mantle. The bill is browniſh, feet yellow, nails black; iris of the eye dark brown.

The moſt abſurd fables have been written upon birds of this genus, and eſpecially upon the bald buzzard, which has been long known, if it may be called knowledge to imbibe and diſſeminate the moſt fooliſh ſtories. Albertus Magnus ſays this bird has one foot like a hawk, the other like a gooſe; Geſner, Aldrovandus, Klein, and even Linnæus, (in his early editions,) have copied him. Kolbe deſcribes eagles who catch wild ducks in the air, and devour them while on the wing, and others who catch fiſh as they fly;

but

but the fact is, that birds of prey always alight before they tear their food. Others maintain, that the eagles put to death ſuch of their young as cannot endure to look againſt the rays of the ſun; that bald buzzards are a croſs-breed of different ſpecies of eagles; that theſe buzzards produce ſmall vultures, and that they in their turn generate large vultures, &c. &c. &c.—Falco haliaëtos, *Linn.* and *Gmel.* Haliaëtos, *Briſſ.* and *Aldrov.* Oſprey, *Penn.* and *Lath.* Blagre, *Vaillant,* N°5.

III. FALCONS, or HAWKS. *Legs naked; leſs.*

The ORIENTAL HAWK. — Legs lead-colour; above the eyes a ferruginous ſtreak; head and body above duſky-brown, beneath ruſty brown; tail ſpotted with white. Inhabits Japan: ſeventeen inches long. Bill large, black, lower mandible yellow; head darker than the body; feathers with a black middle ſtripe; ſecondary wing-coverts ſpotted with white; claws black; tail eight inches long.—Falco orientalis, *Gmel.* Oriental hawk, *Latham.*

The JAVAN HAWK.—Cere and legs yellow; front and rump white; back reddiſh; belly ruſty brown ſtreaked with whitiſh; tail brown, with five black bands. Inhabits Java: ſize of the laſt. Bill yellow at the baſe, tip black; lower wing-coverts reddiſh-white waved with ruſty; quill-feathers tranſverſely ſtreaked and tipt with black; tail-coverts dotted with white; throat and breaſt reddiſh-brown; claws black; nape whitiſh.—Falco Indicus, *Gmel.* Javan hawk, *Lath.*

The RED-and-BLACK BUZZARD.—This ſpecies, and the next, may be taken for the African copies of our European buzzard, as the paraſite and the frog eater, (which we ſhall preſently deſcribe) may be called repreſentatives of the kite and moor-buzzard. The moor-buzzards and kites, tree and wild, live in watery marſhy places avoided by man, and therefore are little regarded by him. But the buzzards, on the contrary, are drawn

towards inhabited places and cultivated lands, by their appetite for thoſe little animals which multiply among us with the corn we ſow and reap. The ſervice they render us in deſtroying rats, mice, moles, and other little animals ſo injurious to agriculture, demand ſafeguard and ſecurity for theſe birds, and even the protection of laws. Thus, at the preſent day, the ſtork is protected in Spain and Holland, the roſe-coloured merule in Barbary, and the martin in India. But in places where men are but beginning to cultivate the ground, on lands as yet but half-cleared, and where the earth yields her increaſe at firſt but unwillingly; in theſe places it is moſt eſſential to encourage animals of this nature. From theſe principles, this ſpecies of buzzard enjoys the greateſt ſecurity among the ſettlers at the Cape of Good Hope: they call it *jakals vogel*, or jackall-bird, becauſe its noiſe imitates that animal; alſo *ratte-vanger*, rat-eater, from its habits: Vaillant calls it *rounoir*, from its colour. This buzzard therefore is found in all parts of the colony, where it is familiariſed and as it were domeſticated. It goes into the fields by day, where, perched on a high clod of earth or on a buſh, it watches for thoſe little miſchievous quadrupeds which are its conſtant food. At the approach of night it returns to rooſt near the houſes, upon the trees or hedges which bound the encloſures of the cattle. Their neſt is made on trees, or in the thickeſt hedges; it is conſtructed of twigs and moſs, and (different from the larger rapacious birds) with a ſoft lining of wool and feathers: the female lays three eggs, ſeldom four, ſometimes only two; but, as no one diſturbs them, they become very numerous notwithſtanding; and are found all over the continent of Africa, but eſpecially near the hordes of ſavages. From the encouragement it receives, it is not ſhy, but may be eaſily approached; yet it is timid, and is eaſily put to flight by the butcher-bird. It is about the ſize of our buzzard, but ſtouter, and has a ſhorter tail,

tail, which is ſquare, and the wings reach nearly to the tip of it. The head, neck, and mantle, are of a browniſh black; ſome white enlivens the feathers of the throat, which takes a reddiſh tinge towards the breaſt, which at laſt is ferruginous red with a few ſtreaks of black. The under part of the body is black mixed with dirty-white. The large wing-quills are blackiſh, with lines of a lighter colour towards their origin, and the inner barbs are whitiſh; the reſt are blackiſh at the ends, their outer barbs and all the part concealed when the wing is cloſed, are mottled or marbled; they are alſo tranſverſely ſtriped with white and black. The tail is dark red above, with a black ſpot at the end of each feather; the two outer feathers only have blackiſh broad ſtripes; it is reddiſh grey underneath. The baſe of the bill, the feet, and legs, are yellow; the bill and claws almoſt black; the eye is very large, and of a dark brown colour. The male and female are generally together: in the evening, before they rooſt for the night, they are ſeen to take a few low vertical flights; at this time they utter thoſe raucous notes which have gained them the name of jackall-birds. The female is largeſt; but her colours are not ſo ſtrong.—Falco rutilus-nigro, *Ency. Lond.* Rounoir, *Vaillant*, N° 16.

The RED-AND-GREY BUZZARD.—The prevailing colour of this bird is ferruginous red; the large wing-quills are black; and the plumage of the front of the neck, breaſt, and under tail-coverts, is light grey; thus making out Vaillant's denomination, *rougri*. The tail is entirely red above, greyiſh beneath, with ſome faint ſtripes. The red on the belly is lighter than on the mantle, and is ſtreaked with black. The bill and feet are lemon-colour; the nails black; the eyes reddiſh.

This ſpecies may be called the *wild buzzard*, if we call the preceding one the *domeſtic*; yet its manners and food are the ſame; and it is probable, ſays Vaillant,

lant, " that, being ſmaller and weaker, it has been driven from the cultivated parts by that ſpecies, like the native men, who, to avoid the cruelties of the whites, or even of their own brethren in a *civilized* ſtate, are forced by degrees to retreat into the deſerts, where their numbers leſſen as their perſecutors increaſe." Thus the red buzzard is rarely ſeen in the colony of the Cape, but only in the barren and deſerted parts. It lays the ſame number of eggs, yet is much leſs numerous; lives on rats, mice, moles, and, for want of theſe, on inſects; its cry reſembles the European buzzard. It is more ſlender, and leſs ſtout, than the former ſpecies; the tail is longer, the bill viſibly weaker. Leſs accuſtomed to the ſociety of man, it is more timid and difficult to approach. In other reſpects it reſembles the preceding.—Falco rutilus griſeis, *Ency. Lond.* Rougri, *Vaillant.* N° 17.

The Crested Buzzard.—This very rare ſpecies Vaillant met with only on the high, barren, and burning, mountains of the Great Namaquois, and thence to the tropic of Capricorn. It is generally perched upon the top of ſome ſteep rock, whence it may watch the motions of a ſmall quadruped very common among theſe barren mountains; this animal is called *klip-das* by the coloniſts at the Cape; and, though other rapacious birds purſue it alſo, yet it is the conſtant employ of the bacha to watch for this favourite prey. Theſe animals, which are very cunning, and always on their guard againſt their cruel enemy, peep cautiouſly out of their holes, and preſently retire if they ſee him coming; then the bird is obliged to make ſhift with inferior food, ſuch as lizards and inſects. But it has been ſeen for three hours together reſting on the ledge of a rock with its head ſunk between its ſhoulders, and looking like a piece of the ſame cliff; thus on the watch, it is ready to dart like lightning on its prey, ſhould it come out of its hole at the bottom of the rock. If the little animal is too quick and eſcapes,

I.L. Reinold del.ª

J. Pass sculp.ª

The Crested Buzzard, and the gloved Buzzard?

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capes, the diſappointed buzzard returns to the ſame place, uttering in lamentable tones *houi-hee*, *houi-hee-hee*, to note its grief and vexation; then flies off to another place, where it fixes with the ſame patience and immobility, till, perhaps more fortunate, it darts upon one of theſe luckleſs animals, who, now uttering the moſt dreadful cries, ſo ſcares the reſt of his ſpecies, that they all run to their holes as faſt as poſſible, and come out no more that day. Vaillant was obliged ſometimes to hunt this little animal, which he calls *daman*, a ſpecies of marmot, for want of better food; but, if a buzzard had caught one, it was uſeleſs to hunt any longer in that quarter, for not one could be found. As ſoon as the bird has ſecured its prey, he carries it off to ſome neighbouring rock, and ſeems to take delight in tearing and devouring it quite alive, as if urged by revenge rather than hunger. The creſted buzzard is a ſolitary bird, except in thoſe intervals when nature ſo powerfully commands all beings, though never ſo unſocial, to ſeek a union for the production of their ſpecies. This time is December; but the union laſts only ſo long as is neceſſary for the raiſing of two or three young, which are hatched in a deep hole in the rock, the neſt conſiſting of dry branches lined with moſs and dead leaves, but made up with very little order or ſymmetry. This bird, when full grown, is about the ſize of the common buzzard, and reſembles that bird in its general appearance; but differs from it in many particulars. It is handſomer, more ſlender, and better fitted for the chace. It has a tuft at the back of the head, which ſpreads horizontally like a rounded tail; this tuft is white, with black at the tips, like the reſt of the feathers on the top of the head. The plumage in general is of a brown earth-colour, darker on the wings and tail, and lighter on the under parts of the body. From the breaſt to the legs the plumage is interſperſed with ſmall white ſpots; ſimilar ſpots appear on the pinions;

nions; the under tail-coverts and lower belly are ſtriped brown and white; and the wing-coverts are tipped with white; a broad ſtripe of light fawn-colour runs acroſs the tail, and its feathers are white at the extremity. The bill is lead-colour; at the baſe yellow, as is the bare ſkin which ſurrounds the eye; the iris is dark red. The feet, toes, and claws, are blackiſh. The female is larger than the male; her white ſpots are not ſo viſible, being ſhaded with fawn-colour. They are very ſhy, and difficult to come at.—Falco bacha, *Ency. Lond.* Bacha, *Vaillant*, N° 15.

The Gloved Buzzard.—This ſpecies is eaſily diſtinguiſhed by his legs being covered with feathers quite down to the toes; the hinder feathers, or breeches, touch the hinder claw, and ſometimes fall below it. "It much reſembles," ſays Vaillant, "a bird of prey, not hitherto deſcribed, but very common in Lorraine; ſo that I ſuppoſe them to be the ſame ſpecies, differing merely in the feathers being more or leſs varied with white."

The gloved buzzard, in Africa, frequents woody places, and lives in ſolitude. Its manners are more fierce than thoſe of the preceding ſpecies; it is not to be driven off by the ſhrikes or the ravens. It flies very gracefully; it often catches partridges, and watches patiently for them from the top of a tree. Vaillant met with this bird only in the Auteniquois foreſts; it is uſually perched on the top of a tree, where it is not eaſily ſeen; but, if a large decayed tree be within the diſtrict, it chooſes that in preference, eſpecially when gorged; the time for ſhooting at it is when juſt perched. It is about the ſize of our common buzzard; and ſo much reſembles it in plumage, that it might be taken for a variety of that ſpecies, but that the legs are more covered with feathers, the bill is thinner, and the claws longer; the tail is longer alſo. The bill is bluiſh; its baſe yellow; toes yellow, nails black; eyes hazel. The general plumage is brown

brown on a reddiſh-white ground. There is a large ſpot of brown on each flank; on the breeches, the brown ſpots are ſemicircular, and ſymmetrically arranged on each feather. The tail is white beneath, with a black bar near the tip; it is white above for about half its length, when it takes a ſlight tint of red, which grows ſtronger towards the end, where it is dark brown, and finally white at the tip. The mantle and wings are dark brown, with occaſional tints of a lighter colour. The wing, when at reſt, reaches to the end of the tail, which is ſomewhat tapering.—Falco manicatus, the gloved buzzard, *Ency. Lond.* Buſe gantée, *Vaillant*, N° 18.

The SPOTTED AFRICAN BUZZARD.—The manners and haunts of this bird are not known. It was ſhot by Vaillant's ſervant while they were encamped on the borders of the Lion-river, in the country of the Giraffes; he never met with another in the whole courſe of his travels. The Kamouniquois, who were preſent when it was brought, knew not the ſpecies in the leaſt: it is probable therefore that it belonged to a more diſtant canton, and had ſtrayed from its native place. In ſhape it reſembles the other African buzzards; but the preſent has a longer tail and ſmaller body than the three preceding ſpecies. The bill is as weak as that of the red-and-grey buzzard; but its claws are larger and more hooked, ſo that it is better qualified for the chace; an additional facility to which is furniſhed by its long tail, and its wings which extend to the extremity of it. The tarſus, or leg, is covered with feathers rather more than half way; the coverts of the thighs are not ſo thick and ample as in the gloved buzzard. The head is light brown, ſet off by ſome white ſtrokes which appear from the inner part of the feathers. The throat and breaſt are whitiſh with brown ſpots; all the under part of the body is reddiſh white with large brown ſpots. The ſcapulars and wing-coverts are dark brown; but, each feather being

being edged or bordered with a lighter colour, the ground appears variegated. The tail is dark brown above, with blackiſh tranſverſe broad bars; underneath light grey with ſhades of a darker colour; and the ſtripes or bars are not ſo viſible. The baſe of the bill is yellowiſh, the upper mandible black, the lower yellow except at the tip which is black. The naked part of the leg is yellowiſh, ſo are the toes; the nails cinnamon colour. The eye is of a reddiſh brown, very dark. The tail is ſquare, that is, all the feathers are of an equal length.—Falco maculatus, the ſpotted African buzzard, *Ency. Lond.* Tachard, *Vaillant*, N° 19.

The Buserai.—This is a very ſcarce ſpecies. Vaillant firſt deſcribed it, unleſs perhaps it be the ſame bird with that called by Mauduit, in the Encyclopédie Methodique, *buſard roux de Cayenne*, the red moor-buzzard of Cayenne. However, it certainly is not properly a moor-buzzard, the legs being ſhorter than in that diviſion.

Vaillant received this with a collection of other birds from Cayenne, but without any written account of its habits and manners. It is a ſmall ſpecies, about the ſize of the moor-buzzard, whence the miſtake noticed above. The wings reach to the end of the tail, which is ſquare like the preceding. The feathers of the thighs fall down a little upon the leg before; but this bird has not thoſe buſhy feathers on the thighs which are called breeches. The origin of the bill appears bluiſh; the reſt of it, and the nails, black. The head, neck, and breaſt, light red, ſhaded with brown, which is darker on the head, and runs in thick lines on the ſhoulders. The large wing-quills are blackiſh; the middle one, ſcapulars, and ſmall wing-coverts, cheſnut-colour ſtriped or ſpotted with dark brown. The tail is yellowiſh-red with zigzag ſtripes of black, and almoſt black at the tip. The belly and legs are yellowiſh red with tranſverſe ſtripes of dark

J. L. Reinold del.t J. Pass sculp.t

The doubtful Hawk, and the tufted Goshawk.

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dark brown.—Falco buſerai, *Ency. Lond.* Buſerai, *Vaillant*, N° 20.

The DOUBTFUL HAWK.—This bird was received from Cayenne; but its country and manners are not known. It has a greater reſemblance to the hawk than to any other bird of prey; ſo that Vaillant has given it the doubtful deſignation of *buſon*. It is about the ſize of the Falco pygargus, or ringtail. The feet and nails are black; ſo is the bill, but yellow at its origin. The feathers of the head and neck are black at their extremities, but white on thoſe parts which are concealed when they lie naturally one over another. The large wing-quills are black for the moſt part, their inner barbs mottled white and red; the next to theſe are cinnamon-colour ſhaded with black, and dark brown at the tips. The mantle, ſcapulars, and ſmall wing-coverts, both above and below, are very dark brown, varied and bordered with red. The feathers of the tail are of equal length; they are black, with each a tranſverſe ſtripe towards the middle; a little edging of white appears at the tips, and ſome ſlight tints of red in thoſe parts concealed by the under tail-coverts. All the under parts of the body, and the legs, are reddiſh ſtriped with black. This bird is not breeched; and the head is ſmall; by both which marks it is diſtinguiſhed from its kindred ſpecies. The wings when folded up do not reach above half the length of the tail; ſome part of the leg is feathered; the noſtrils, and all around them and the baſe of the bill, are yellow. — Falco buſon, the doubtful hawk, *Ency. Lond.* Buſon, *Vaillant*, N° 21.

The GREAT BUZZARD.—A few words have been erroneouſly ſaid of this ſpecies, vol. iv. p. 95. confounding it with the eagles. Specific character, cere and feet yellow; body above brown, beneath rufous with brown oval ſpots; tail barred with brown. From twenty to twenty-three inches long. Bill and claws black; irids ſaffron-colour. Inhabits Europe.—Falco

gallinarius, *Gmel.* Circus major, gros buzard, *Briſſ.* p. 114. Great buzzard, *Turton.*

The variety, β. is ſmaller, with wings more variegated.—F. nævius, *Gmel.* F. minor, *Briſſ.* p. 116.

The JAMAICA BUZZARD.—Cere and legs yellow; body browniſh-buff, with paler ſpots beneath; crown pale. Bill and claws black; irids yellow; ſhafts of the back and tail-feathers brown in the middle; legs ſhort. Inhabits Jamaica; and is very beautiful.—Falco Jamaicenſis, *Gmel.* Cream-coloured buzzard, *Latham.* Jamaica buzzard, *Turton.*

The AMERICAN BUZZARD.—Cere and legs pale yellow; body above brown, beneath white; tail pale ruſty, with a tranſverſe ruſty bar near the tip. Bill and claws black; chin white mixed with brown; throat and breaſt paler than the back; rump white. Inhabits North America.—Falco borealis, *Gmel.* American buzzard, *Latham.* Red-tailed falcon, *Penn.*

The LEVERIAN FALCON.—Legs yellow; head alternately ſtreaked with brown and white; body above brown, beneath white; wings dark brown. Bill duſky; feathers with a large white ſpot at the tip; tail-feathers with nine white and as many duſky bands, the middle ones duſky and cinereous. Inhabits Carolina; and is preſerved in the Leverian muſeum.—Falco Leverianus, *Gmel.* Leverian falcon, *Pennant.*

The SPECKLED BUZZARD.—Legs yellow; head and neck white ſpotted with ferruginous; body above brown, beneath white; tail pale brown with paler bands croſſing each other. Above twelve inches long. Bill duſky; claws black. Inhabits North America.—Falco variegatus, *Gmel.* Speckled buzzard, *Lath.*

The BUZZARDET.—Legs yellow; body white with large brown ſpots; tail duſky with white ſtreaks and dots. Fifteen inches long; legs long; ſpots underneath few; leſſer coverts brown. Inhabits North America.—Falco albidus, *Gmel.* Buzzardet, *Penn.*

The

The FROG-EATER, or AFRICAN MOOR-BUZZARD. —This ſpecies reſembles our common moor-buzzard in habits and dimenſions; but the bill is longer, and not ſo thick at its origin; and its colours are totally different. The upper parts of the body are of a light brown umber, at leaſt on the viſible ſurface of the feathers, for the concealed parts are uſually white, generally unequally ſo on the two ſides of the ſtem. The throat and cheeks are covered with weak ſcattered feathers, of a whitiſh colour, with longitudinal brown ſtripes. The under parts of the body are light brown, ſlightly varied with white on the breaſt and lower belly. The feathers on the thighs and underneath the tail are ferruginous red mixed with white at the edges. The wings are brown with tranſverſe ſtripes of white and light brown underneath; the tail is ſquare, and of the ſame colour with the beam-feathers of the wings. There are ſeveral white ſpots on the top of the neck, and on the pinions. The legs and feet are yellow. The bill is of a pale blue at the origin, black at the tip, which is the colour alſo of the claws. The wings when at reſt reach about two-thirds the length of the tail. The iris of the eye is light brown.

The coloniſts of the Cape, ſeeing this bird continually hunting the marſhes, perching on thickets or contiguous trees, and thence darting on the frogs and devouring them among the ruſhes, call it *kikvors-vanger*, or frog-catcher; whence Vaillant calls it, in French, *grenouillard*. But this buzzard is not content with hunting frogs only; it declares war againſt all kinds of water-fowl, eſpecially the young ones. If ſeen to riſe from among the ruſhes juſt after making a pounce, it may be concluded the bird has miſſed its aim; for otherwiſe it does not appear again till it has devoured the prey, which it always does on the ſpot. It catches and eats fiſh alſo. In marſhy places and

among reeds it makes a neſt of the ſtalks and leaves of water-plants. The female lays four white eggs.

This ſpecies abounds through a vaſt extent of the African continent, from Needle-cape quite to Caffraria, that is, along the whole eaſtern coaſt; they are much ſcarcer in the weſtern regions, where indeed the country is by no means ſo congenial to their habits, being ſandy, dry, and barren, and preſenting very few marſhy or moiſt places: therefore they are moſt plentiful on the ſhores of the Duyven-hock, the Gaurits, the Brak, and in the marſhes of the Auteniquois. The female is about one fourth bigger than the male; and her colours are ſomewhat weaker.—Falco ranavorans, the frog-eater, *Ency. Lond.* Grenouillard, *Vaillant*, N° 23.

The Sclavonian Buzzard.—Cere yellow; legs downy; body brickduſt colour with black ſpots; head and neck whitiſh. Inhabits Sclavonia; ſize of a common cock. Bill bluiſh black; ſecondary quill-feathers brown with black bands; wing-coverts variegated with dull red and black ſpots; tail white on the upper half, growing brown at the end, and edged with dull red; rump and vent whitiſh with a few dull red ſpots; legs irregularly ſtreaked and ſpotted with black; irids blackiſh. This and the two following ſpecies are added by Turton from Smellie's edition of Buffon.—Falco Sclavonicus, the Sclavonian buzzard, *Turton.*

The Croatian Buzzard.—Cere bluiſh; body above variegated brown and ruſty, beneath ruſty with irregular oval brown ſpots; tail-feathers barred with blackiſh, edged with white. Inhabits Sclavonia and Croatia; ſize of a hen. Feathers above edged with ruſty; tail above brown with ſeveral darker bands, white at the tip, underneath whitiſh with white bands; legs yellow.—Falco marginatus, the Croatian buzzard, *Turton.*

The Ruſty Buzzard.—Body above brown, beneath whitiſh-yellow; breaſt with a yellow ſpot; tail-

tail-feathers with four dull-red bars. Inhabits Sclavonia. Bill black; head whitiſh yellow; wing-coverts white at the tip.—Falco rubiginoſus, the ruſty buzzard, *Turton.*

The JAVA BUZZARD.—Cere black, yellow in the middle; legs yellow; head, neck, and breaſt, cheſtnut; back brown. Inhabits the coaſt of Java; feeds on fiſh.—Falco Javanicus, *Gmel.* from the *Lichtenberg. Magaz.* Java buzzard, *Turton.*

The RED-SHOULDERED BUZZARD.—Cere and legs yellow; body above duſky-brown, beneath rufous with white and pale ruſty lines; tail-feathers duſky-brown with tranſverſe dirty-white bands and tips; from twenty to twenty-two inches long. Bill blue; claws black; head and neck yellowiſh-white ſtreaked with duſky lines. Inhabits Long-iſland.—Falco lineatus, *Gmel.* Barred-breaſted buzzard, *Lath.* Red-ſhouldered falcon, *Penn.* Red-ſhouldered buzzard, *Ency. Lond.*

The PLAIN FALCON.—Body duſky-brown, beneath ſlightly ſpotted with white; tail-feathers in the middle pale brown; two feet long. Bill black; nape ſpotted with white. Inhabits Hudſon's-bay.—Falco obſoletus, *Gmel.* Plain falcon, *Penn.*

The COLLARED FALCON.—Cere, eye-lids, and legs, yellow; body waved with cinereous and white; collar white; ſize of a hen. Bill lead-colour; body beneath white, with ſmall brown heart-ſhaped ſpots; tail with twelve or thirteen bands alternately white and brown; claws black. Inhabits Sweden, Siberia, and Greenland.—Falco ruſticolus, *Linn.* and *Gmel.* Collared falcon, *Penn* and *Lath.*

The NEW-ZEALAND FALCON.—Cere and legs yellow; body black-brown, beneath ſpotted with reddiſh; wings and tail ſpotted with grey. Bill blue, black at the tip; irids and naked orbits blue, of the female yellow; eighteen inches long. Inhabits New Zealand.—Falco Novæ Scelandiæ, *Gmel.* New-Zealand falcon, *Lath.*

The

The TUFTED GOSHAWK.—This is a new ſpecies from Cayenne, deſcribed by Vaillant in his Hiſtory of African Birds. The *white gos-hawk* of ſome writers is really the preſent ſpecies in its infancy; it is erroneouſly deſcribed, under various names, by Briſſon and Buffon. It differs totally from the European gos-hawk in the colours of its plumage, and is at leaſt one-third bigger. The ſpecific character may be taken from "a tuft of feathers of unequal length, which ſpring from the hind-head, and fall back upon the neck; and the legs entirely covered with feathers."

The top of the head is black; but the feathers are white underneath, which ſometimes appears when they are ruffled; the ſame colours prevail in the tuft. All the hind part of the neck is dark red, the front white ſhaded with rufous; a black ſtripe runs from the corner of the mouth down the ſides of the neck, ſeparating the red of the neck from the white of the throat. On all the front part of the body large black ſpots appear on a white or reddiſh ground. The legs are tranſverſely barred with white and black; theſe ſtripes are fainter on the legs. The wings and mantle are dark brown ſhaded with black. The ſmaller wing-coverts have little ſtrokes of white at their edges; the tail-quills are brown, with broad tranſverſe ſtripes of black. The bill is bluiſh, at the baſe reddiſh; the toes yellowiſh, the claws horn-colour.

The deſcription of this being taken from a dried ſpecimen from Cayenne, its manners and habits are not known; from the ſtrength of its beak and claws, it muſt be a great deſtroyer of game, and might be very properly reared among falcons for ſport.—Falco palumbarius criſtatus, the tufted gos-hawk, *Ency. Lond.* Autour huppé, *Vaillant*, N° 26.

The TACHIRO.—This is claſſed by Vaillant among "birds of prey to which we have nothing analogous

analogous in Europe." It certainly belongs to the *falco* genus, though whether to the falcons or the gos-hawks, or to what diviſion, it is not eaſy to ſay. The legs are ſhorter than the falcons or ſparrow-hawks, and the wings are longer and differently ſhaped. It is nearly the ſize of our gos-hawk.

This bird is met with in the majeſtic foreſts of the moſt diſtant parts of the Auteniquois country. In the gloom of theſe woods, amid immenſe large trees, which have been growing undiſturbed for many generations; there, among the harmonious warblings of various birds, the diſcordant and piercing cries of the tachiro ſtrike the ear. This voracious animal is the ſcourge and tyrant of all the ſmaller birds within his reach.

The tail of this bird is nearly as long as the body; and the wings when at reſt reach ſomething more than half its length. The head and neck are varied with white and red ſpotted with dark brown. The throat is white mixed with red. The mantle is a dull brown, as well as the wing-coverts, though each feather is edged with lighter tint. The large wing-quills are tipped with white; the tail underneath is white, with broad bars of duſky black; it is brown above, with darker bars. The under parts of the body are white mixed with red, and brown ſpots of various ſhades; theſe ſpots are either round or ſemicircular, but on the thighs they are heart-ſhaped. The bill is bluiſh, the nails black, the legs and feet yellow. The iris of the eye is of the colour of a topaz. The female is larger than the male; her plumage has more of a reddiſh tinge, the white not ſo clean, the ſpots not ſo ſtrongly marked.

Theſe birds build in the forked branches of the largeſt trees; the neſt is conſtructed of light twigs and moſs, and lined with feathers. "I diſcovered one of theſe neſts," ſays Vaillant, "in which were three young, entirely covered with a reddiſh down. Intending

tending to let the old ones bring them up for ſome time, I left them: I viſited them every three or four days, and generally carried ſome bird's fleſh, which I laid on the edge of the neſt; and it was always devoured before my next viſit. But I am inclined to think the old ones ate it themſelves; for I generally obſerved about the neſt a vaſt quantity of graſshoppers' wings, and thoſe inſects I ſuppoſe to have been the principal food of the young. The old ones kept up for the greateſt part of the day a ſhrill noiſe like *cree-cree—cree-cree-cree—cree-cree*; i.e. the ſame ſyllable or note twice and thrice alternately. When I approached the young, the old ones came both ſo near me, to defend them, that I could eaſily have knocked them down with a ſtick. But I waited till it was too late to ſeize the prey I meditated; one day, when I viſited the neſt as uſual, both young and old had diſappeared. By the appearance of the pieces of ſhells which remained, the eggs were white with ſome red ſpots. I never met with the tachiro in the champaign country; only in theſe enormous woods which bound the Queur-boom, and in the vaſt foreſts of the Auteniquois."—Falco tachiro, *Ency. Lond.* Tachiro, *Vaillant*, N° 24.

The CAYENNE FALCON.—Legs blue; head and neck bluiſh-white; back and wings duſky-aſh; throat, breaſt, and belly, whitiſh. Inhabits Cayenne. Bill blue; claws and primary quill-feathers black, ſecondaries ſtreaked with black; tail with four or five alternately black and white bands, white at the tip.—Falco Cayennenſis, *Gmel.* Cayenne falcon, *Lath.*

The LONG-TAILED FALCON.—Cere and legs yellow; bill blackiſh; body above cinereous, beneath white; inner quill-feathers cinereous with white tips; nineteen inches long, tail nearly nine. Bill black, green at the root. Inhabits Ruſſia.—Falco macrourus, *Gmel.* Long-tailed falcon, *Lath.*

The

THE GENTLE FALCON, has been ſlightly mentioned along with the Common Falcon, vol. iv. p. 117. Specific character, Cere and legs yellow; body cinereous with brown ſpots; tail with four blackiſh bands; larger than the gos-hawk; lives on partridges. Bill lead-colour; irids yellow; head reddiſh with oblong black ſpots; tail dotted with white; claws black. Moults in March. Inhabits the mountains of Europe and North America.—Falco gentilis, *Linn. Gmel. Scopoli, Geſner, Aldrov. Ray*, and *Briſſ.* Gentle falcon, *Penn. Alb. Will.* and *Lath.*

The ICELAND FALCON.—Cere and legs yellow; body brown, beneath white with hearted black ſpots; tail banded with white. Inhabits Iceland; twenty-one inches long. Head white mixed with ferruginous; back duſky, feathers whitiſh, banded with brown and edged with white; tail rounded, with about fourteen bands alternately brown and white; claws black, the hind one very long.—Falco Iſlandus, *Gmel.* from *Brunn.* N° 9. Iceland falcon, *Turton.*

There are two varieties: 1. White; above with ſmall hearted black ſpots; tail white; two middle tail-feathers obſcurely banded with black.—F. albus, *β, Gmel.* from *Brunn.* N° 7. 2. White, with large hearted ſpots; tail-feathers white, all barred with black.—F. maculatus, *γ. Gmel.* from *Brunn.* N° 8.

The BARBARY FALCON.—Cere and legs yellow; body bluiſh ſpotted with brown; breaſt without ſpots; tail barred. Bill black; irids yellow; wings ſcarcely ſpotted; breaſt yellowiſh-white verging to blue; belly with oblong black ſpots; tail with ſeven tranſverſe brown bands. Inhabits Barbary; ſeventeen inches long.—Falco Barbarus, *Gmel.* F. Barbaricus, *Briſſ.* F. tunetanus, *Aldrov.* and *Ray.* Barbary falcon, *Will. Alb.* and *Lath.*

The PEREGRINE FALCON.—Cere and legs yellow; body above cinereous ſtriped with brown, beneath reddiſh white with blackiſh ſtripes; tail dotted with white.

white. Inhabits Europe, northern Aſia, and America; migrates.—Falco peregrinus, *Gmel. Ray*, and *Briſſon*, p. 98 Faucon pelerin, *Buff.* Peregrine falcon, *Penn. Will.* and *Lath.*

The *Tartarian Falcon* is a variety, with ruſous wings and very long toes.—F. tataricus, *β. Gmel.* from *Briſſ.* p. 100. Faucon de Tartarie, ou de Barbarie, *Belon.* Tartarian falcon, *Lath.*

The Spotted Falcon.—Cere yellow; head and body above white with pale reddiſh ſpots, beneath white; breaſt a little ſpotted with ferruginous. Bill black; wings with cinereous bands; tail barred with lighter and darker brown; rump white. Inhabits England.—Falco verſicolor, *Gmel.* Spotted falcon, *Penn.* and *Lath.*

The Booted Falcon.—Cere and legs yellow; body above variegated with blackiſh-brown and dirty-grey, beneath brown-yellow with longitudinal blackiſh lines; feet feathered to the toes. Length nineteen or twenty inches; bill blackiſh; eyelids yellow; head and neck yellow-grey with blackiſh lines; tail brown, towards the tip blackiſh, grey at the point, ſpotted with white at the ſides; claws black.—Falco pennatus, *Gmel.* Faucon pata, *Briſſ.* Booted falcon, *Lath.*

The Chocolate Falcon.—Cere yellow; body chocolate mixed with ruſty, beneath white at the ſides; legs feathered to the toes. Twenty-two inches long; feeds on the duck tribe, which it ſeizes from rocks as they riſe out of the water. Bill black; two middle tail-feathers black and cinereous, the reſt pale, black without and white within; toes ſhort. Inhabits Hudſon's Bay.—Falco ſpadiceus, *Gmel.* and *Phil. Tranſ.* lxiii. 281. Chocolate-coloured falcon, *Penn.* Bay falcon, and Placentia falcon, *Lath.* Chocolate falcon, *Ency. Lond.*

Latham's *White-rumped Bay Falcon* is a variety of this.—F. uropygio albo, *Gmel.*

St. John's Falcon.—Cere and feathered legs yellow;

low; body brown, above with black and dirty-white oblique lines, beneath with white and yellowiſh ſpots; tail barred, white at the tip. Twenty-one inches long; toes ſhort. Inhabits Hudſon's bay.—Falco S. Johannis, *Gmel.* St. John's falcon, *Penn.* and *Lath.*

The NEWFOUNDLAND FALCON.—Cere and legs yellow; body above brown, beneath and hind-head ferruginous; tail variegated with lighter and darker brown lines. Twenty inches long; legs half feathered. Inhabits Newfoundland.—Falco Novæ-terræ, *Gmel.* Newfoundland falcon, *Penn.* and *Lath.*

The STARRY FALCON.—Legs blue; body blackiſh with radiate ſpots, beneath mixed white and black. Size of the peregrine; wings ſhorter; tail longer; irids golden yellow. Inhabits Europe.—Falco ſtellaris, *Gmel.* from *Briſſ.* Blue-footed falcon, *Will.* Starry falcon, *Lath.*

The WINTER FALCON.—Cere yellow; head and back black-brown; neck ſtreaked with white; breaſt and belly white with hearted ſpots. Twenty inches long; male wing-coverts duſky, dirty-white at the edges, the outer ones orange; tail with brown and black bars, white at the tip; bill black; feet long, ſlender. Inhabits New York during winter.—Falco hyemalis, *Gmel.* Winter falcon, *Penn.*

Latham's *Northern Falcon* is a variety of this.—F. hyemalis β, *Gmel.*

The RHOMBIC FALCON.—Legs yellowiſh; body above grey, beneath brown with rhombic ſpots: tail-feathers with eleven oblique black bars. Nineteen inches long; head and back of the neck black; bill duſky. Inhabits India. This and the three following are added by Turton from Smellie's edition of Buffon.—Falco rhombeus, the rhombic falcon, *Turton.*

The BLACK-NECKED FALCON.—Legs yellow; body reddiſh with black bars; crown and neck ſtreaked with black; tail-feathers blackiſh at the tips. Bill black; be-

hind the eyes a black ridge. Inhabits Cayenne.—Falco nigricollis, the black-necked falcon, *Turton.*

The White-necked Falcon.—Legs yellow; head, neck, fore-part of the back, breaſt, and belly, white; wings black with white ſpots; feathers between the ſhoulders with ſquare black ſpots. Twenty-two inches long; quill-feathers ſpotted beneath with white from the root to the middle. Inhabits Cayenne.—Falco albicollis, the white-necked falcon, *Turton.*

The Red-headed Falcon.—Cere and chin yellow; head and neck rufous, with dark ſtreaks; belly whitiſh with narrow black bars; four middle tail-feathers with one, the outer with ſix, pale bars. Nineteen inches long. Inhabits Cayenne.—Falco meridionalis, the red-headed falcon, *Turton.*

The Crested Indian Falcon.—Cere and feathered legs yellow; creſt hanging, black; body above black, beneath ſtreaked black and white. Size of the gos-hawk; bill pale blue; irids yellow; neck tawny; tail with tranſverſe black and cinereous bands; claws black. Inhabits India.—Falco cirrhatus, *Gmel.* F. Indicus criſtatus, *Briſſ.* F. I. cirrhatus, *Ray.* Faucon buppé des Indes, *Buff.* Creſted Indian falcon, *Will.* and *Lath.*

The Pied Falcon.—Legs yellow; head, neck, back, ſhoulders, and quill-feathers, black; reſt of the body, wing-coverts and tail, white. Sixteen inches long; bill, claws, and middle wing-coverts, blackiſh: irids yellow; orbits ſpotted with white. Inhabits Ceylon.—Falco melanoleucos, *Gmel.* Black-and-white Indian falcon, *Penn.* and *Lath.* Pied falcon, *Turton.*

The Ceylonese netted Falcon.—Cere yellow; body milk-white; two feathers of the hind-head hanging down. Bill duſky. Inhabits Ceylon.—Falco Ceylonenſis, *Gmel.* Ceyloneſe creſted falcon, *Lath.* Ceylon falcon, *Turton.* Ceyloneſe falcon, *Ency. Lond.*

The

The GREY FALCON.—Cere and legs yellow; body above duſky-grey, beneath white with oblong black ſpots; tail-feathers long, the two middle ones uniform, the reſt ſpotted. Size of a crow, bill bluiſh; irids red; head before duſky-brown, behind white, ſides and chin buff; quill-feathers ſpotted with white. Inhabits England.—Falco griſeus, *Gmel.* Grey falcon, *Penn.* and *Lath.*

The BROWN GERFALCON.—Cere blue; legs yellow; body brown with cinereous bands beneath; ſides of the tail white. Legs ſometimes bluiſh; bill ſtrong, hooked, upper mandible ſharply angular at the edges; head ſtreaked longitudinally with duſky; neck and belly white. Inhabits Europe; preys on herons, cranes, and pigeons. See vol. iv. p. 114. which relates chiefly to the White Gerfalcon, and its variety. —Falco gyrfalco, *Linn.* and *Gmel.* Brown Jerfalcon, *Latham.*

The SURINAM FALCON.—Cere and legs yellow; body whitiſh-brown; eyelids bony. Plumage above white at the baſe; beneath and tail-feathers yellow ſpotted with white and brown; noſtrils with a fleſhy lobe between them; when irritated or frightened, inflates its head to the ſize of the body. Inhabits Surinam and Cayenne.—Falco ſufflator, *Gmel.* Surinam falcon, *Lath.*

The LAUGHING FALCON.—Cere and legs yellow; eyebrows white; body varied brown and whitiſh; crown white with a black ring. Back, wings, and rump, brown; neck, chin, breaſt, belly, and under parts of the wings, white; tail with yellow and black bands; emits a kind of laugh when looked at. Inhabits South America.—Falco cachinnans, *Gmel.* Laughing falcon, *Lath.*

The WHITE LANNER.—Cere and legs yellow; body beneath whitiſh, quill-feathers blackiſh. Suppoſed to be a variety of the preceding, and ſo deſcribed

ſcribed by Turton. There is another variety, with the two middle tail-feathers grey, the reſt ſpotted with white.—Falco albicans, *Gmel.* Lanarius albicans, *Briſſ.* Lanarius, *Aldrov.* 181, 183. White lanner, *Lath.*

The STREAKED FALCON.—Cere and legs yellow; body black with white ſpots; beneath white; head and neck white ſtreaked with black; area of the eyes black; quill-feathers black with a white band in the middle. Fifteen inches and a half long. Inhabits Cayenne. This and the following are added by Dr. Turton, from Smellie.—Falco melanops, the ſtreaked falcon, *Turton.*

The NOTCHED FALCON. Bill brown with two tooth-like proceſſes; body lead-colour; breaſt and belly reddiſh; vent white; quill and tail-feathers barred with white. Fourteen inches long; three bars on the tail, above pale brown, beneath white. Inhabits Cayenne.—Falco bidentatus, the notched falcon, *Turton.*

The ACOLI FALCON.—This African ſpecies greatly reſembles in ſize, colour, and proportions, the hen-harrier, or St. Martin's bird; what ſpecifically diſtinguiſhes the acoli is, "the baſe of the bill is bright red, and the belly ſtriped."

The acoli, like the St. Martin, has a long ſlender body, long legs and tail: theſe characters are equally applicable to the ſparrow-hawks; but then the latter have not long wings like the acoli and the reſt of the falcons; on the contrary, they have the ſhorteſt wing-quills of any of the rapacious kinds, except indeed the gos-hawks, which have ſmall wings, and are farther diſtinguiſhed from the ſparrow-hawks by having legs ſtill ſhorter.

The prevailing colour of the acoli is a pale blue-grey, which ſpreads over the head, neck, and mantle. The thighs are well covered with feathers, which hang down over the legs, though none grow upon the legs.

legs. All the under part of the body is whitiſh, and prettily ſtriped like the ſinging falcon, from which it muſt be carefully diſtinguiſhed: the acoli is not ſo large; its tail not taper; it has only a ſharp cry, but no ſong; and, if the two ſpecies are found in the ſame quarter, they never intermix. This bird frequents ploughed lands in the colony of the Cape; in the uncultivated country it keeps in ſandy places; where, perched on a mole-hill, a clod of earth, or one of thoſe mounds raiſed by the ants, it ſits watching for mice, moles, and young birds. This bird flies well, and ſwiftly, but generally low. It is by no means ſhy; it will even follow the hunter, hovering round him to ſeize upon the larks which riſe before him, and thus may be eaſily ſhot; "at once the chaſer and at once the prey."

The male and female are commonly ſeen together; they build in a thicket, and lay four eggs of a dirty white colour, and oval, (the eggs of the ſinging falcon are almoſt round.) The acoli is moſt frequently met with in Swartland, Rooyeſand, and at Four-and-twenty Rivers, in which diſtricts the ſinging falcon is never found: in the interior the acoli is ſometimes met with about the Swartkop and Sondag rivers, where the lands have been cleared and cultivated. In Swartland, the coloniſts call it *witte valk*, white falcon; in other parts *leeuwerk vanger*, lark-catcher. The bill is bluiſh, round the noſtrils bright red, eyes and feet orange-colour; nails and tip of the beak black.

The female is a full third larger than the male; the baſe of her bill is of a fainter red; ſhe is about the ſize of the male ſinging falcon; and the reader ſhould be reminded, that, in compariſons of ſize, it muſt always be underſtood that the male muſt be compared with the male, the female with the female; for there is generally a conſiderable difference in ſize between the male and female of the rapacious kinds.—Falco acolius, *Ency. Lond.* Acoli, *Vaillant*, N° 31. The

The Bengal Falcon.—This Indian ſpecies alſo reſembles the St. Martin, and naturally follows the African falcon, or acoli. *Tchoug* is the name it bears at Bengal, of which place it is a native. It is about the ſize of the St. Martin; the bill is entirely black, and very ſhining, eſpecially at the baſe, where ſhoot out ſome ſtiff hairs of the ſame colour, which afterwards bend back and cover the noſtrils; ſome hairs alſo grow round the lower mandible. The head, neck, and mantle, are very dark brown, approaching to black; but it is lighter on the large ſcapulars, and part of the wing-coverts; other parts of the wings are light grey, and ſome are white and brown intermixed. On part of the hind head, the black, brown, and white, are very ornamentally mingled. The large wing-quills are black; the middle ones light aſh-colour, a mixture very agreeable to the eye. The rump and all the under parts of the body, including the thighs and under tail-coverts, are of the pureſt white. The tail-quills are all of equal length, and of a light grey, a little inclining to red; the two middle ones have each a brown creſcent-ſhaped ſpot. The legs are long and ſlender, and of a pale yellow; toes the ſame colour, armed with black claws.

The ſpecimen from which Vaillant deſcribed this ſpecies he ſuppoſes to have been a young bird which had not completed its ſecond moult, on account of its variegated appearance, and the intermixture of brown, black, and white, feathers; and more particularly becauſe the two wings did not preſent the ſame diſtribution of colours, a certain mark of an unfiniſhed moult. He is of opinion that the tchoug, when at its full growth, will have the head, neck, mantle, and wings, entirely black; the reſt white. Vaillant is farther of opinion that this ſpecies is found at the Cape as well as at Bengal.—Falco Bengalenſis, *Ency. Lond.* Tchoug, *Vaillant*, N° 32.

The

The HEN HARRIER, and the RING-TAIL HAWK.—See theſe deſcribed vol. iv. p. 130—132. It is now clearly aſcertained that theſe are one and the ſame ſpecies, both having been found to proceed from the ſame brood; ſo that Falco cyaneus and Falco pygargus ought no longer to be ſeparated.—*Linnéan Tranſactions*, vol. ix. 1809.

The HUDSON'S-BAY RING-TAIL.—Cere and legs yellow; back brown; eyebrows white; ſhield on the wings bluiſh. Twenty-one inches long. Bill and claws black; body beneath white, with reddiſh brown ſpots; two middle tail-feathers browniſh, the other ones white, the reſt bluiſh aſh; all with tranſverſe brown ſtripes. Inhabits Hudſon's-bay. It is doubtful whether this be not the F. communis ater.—Falco Hudſonius, *Gmel.* Accipiter Freti Hudſonis, *Briſſ.* Ring-tail hawk, *Edw.* Hudſon's-bay ring-tail, *Lath.*

The CAYENNE RING-TAIL.—Cere blue; legs yellow; body above chocolate, beneath reddiſh buff; eyebrows yellow; tail with pale and duſky-brown ſpots. Two feet long. Bill and claws black; primary quill-feathers within duſky, without aſhy-blue with brown bands, ſecondary paler; tail-feathers white at the tip. Inhabits Cayenne.—Falco Buffoni, *Gmel.* Cayenne ring-tail, *Latham.*

The MARSH HAWK.—Cere and legs orange; body above brown, beneath ſhining ruſty; tail with four black bands. Inhabits Jamaica and Pennſylvania during ſummer only; lives in fens, and feeds on ſmall birds, reptiles, and ſerpents.—Falco uliginoſus, *Gmel.* Marſh hawk, *Penn. Edw.* and *Lath.*

The MOUNTAIN FALCON.—Legs yellow; body above aſhy-brown; chin and throat ſpotted with whitiſh; tail cinereous at the root, blackiſh in the middle, white at the tip. Bill and claws black; ſpots on the neck ſometimes ruſty, ſometimes black; neck and breaſt ſometimes wholly black. Inhabits Europe.—Falco montanus, *Gmel. Ray,* and *Briſſ.* Mountain falcon, *Will.* and *Lath.*

The variety β. has the body cinereous above, white beneath; two outer tail-feathers white.—F. montanus cinereus, *Briſſ.* F. montanus ſecundus Aldrovandi, *Will.*

The Mountain Kestrel.—This ſpecies is very common in the colony of the Cape, where it is called *rooge valk*, red falcon, or *ſteen valk*, rock-falcon; Vaillant calls it *le montagnard*. He found it in moſt parts of Africa which he viſited; it frequents mountains and rocky hills, and commonly remains in the quarter where it was hatched. It feeds on ſmall quadrupeds, lizards, and inſects which breed in the rocks. And on the ſteepeſt rock it builds a flat neſt without any ſhelter above: the neſt conſiſts of bits of wood and graſs, and by no means neatly faſhioned: the eggs are from ſix to eight in number, of the ſame dark-red colour as the plumage. Its cry is very ſharp and piercing; it repeats *cree-cree-cree*, *cree-cree-cree*, inceſſantly, if a man or any animal approaches its ordinary haunts. When they have eggs or young, they are very bold, and will attack any thing that approaches the neſt.

The mountain keſtrel is ſomewhat larger than the common one; the tail is not ſo tapered, and the wings reach only to the middle of the tail; while the European keſtrel has wings longer than the tail. The tail of the preſent ſpecies is light red, croſſed with a few broad bars of brown; the head is reddiſh alſo, as in the female keſtrel; but in the male keſtrel theſe parts are bluiſh: in other reſpects the two ſpecies agree pretty well in colour. The nails and bill are black; the cere and feet yellow; the throat whitiſh; the cheeks and hind part of the head rufous ſhaded with brown; all the mantle is dark red with black ſpots of a triangular form; the belly and thighs are dark grey with a line of black down each feather. The breaſt and ſides are of a lighter red than the back, with longitudinal ſpots. The wing-quills are black in the part that appears when the wings are at reſt; underneath they are ſtriped with white; and the ſmaller wing-

L.L. Reinold del.t J. Pass sculp.t

The mountain Kestrel, and crested Fisher Falcon.

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FALCO.

wing-coverts underneath are ſpotted with black on a whitiſh ground inclining to rufous. The female is ſomewhat larger; the red colour is not ſo ſtrong, and the black ſpots on the mantle are fewer.--Falco tinnunculus montanus, the mountain keſtrel, *Ency. Lond.* Montagnard, *Vaillant*, N° 35.

The BOHEMIAN HAWK.—Legs yellowiſh; body above cinereous, beneath white; five outer quill-feathers black outſide; orbits white. Twelve inches long; preys during the evening on mice. Bill near the angles of the mouth yellowiſh; irids yellow; tail ſharp, long; legs thickiſh, feathered below the knees; claws black, roundiſh. Inhabits the mountains of Bohemia.—Falco Bohemicus, *Gmel.* Mæuſe-habicht, *Meyer.* Bohemian hawk, *Turton.*

The CRESTED FISHER FALCON of AFRICA.—This is probably a variety of the FISHER FALCON, vol. iv. p. 124. It is tufted like that, and very like in plumage, but ſmaller. A very remarkable trait, which we do not find in the common fiſher-falcon, is, that "the lower mandible, beſides being notched on each ſide like the other, is cut off or ſhortened at the end, and the upper one hooks conſiderably over it;" there is no appearance of this peculiarity in Adanſon's deſcription of the *tanas*, nor in Buffon's plates. The tuft is alſo different from the deſign given by Buffon; yet after all, Vaillant conceives it to be the ſame ſpecies, badly deſcribed, and that Buffon's plate was meant to repreſent ſome other bird of prey, for his engravings and deſcriptions very often diſagree. They are both African birds, and may very poſſibly differ in ſize in different parts of the country, from Senegal to the Cape.

The tuft is very large; it riſes from the forehead, and ſtretches beyond the back of the head, where it lies down; but it is often erect, when the bird is agitated either with anger or love; particularly the latter, as the male ſpreads it out and expoſes it to pleaſe

and invite his mate, to whom he is much attached. The male of this ſpecies is about the ſize of a common pigeon; the female is larger by a fourth part, but her tuft is ſhorter. The colours are nearly the ſame. The upper ſurface of the body is ſlate-colour, the tuft browniſh; the throat, neck, and breaſt, dirty white; the under part of the body the ſame, with tranſverſe ſtripes; the tail is ſtriped croſſwiſe alſo. The feet and toes are yellow. The baſe of the bill is blue, the end black, the nails or claws are black, taper, and very ſtrong. There is a brown mark on each ſide the mouth. The wings reach lower than the tail when folded in The eye is of orange yellow.

This beautiful ſpecies frequents lakes, ſea-ſhores, and rivers ſtocked with fiſh, feeding upon all kinds of ſmall fiſh and crabs, as well as muſcles, cockles, &c. the ſhells of which eaſily yield to their ſtrong bill. They will greedily purſue the gull, the man-of-war bird, and even the albatroſs and pelican, birds much larger than themſelves; the ſwallow ſeems to fear leſs than thoſe large palmipede birds. When the creſted falcon haunts the ſea-ſhores, his neſt is generally among the rocks: if more inland, it is built among the trees which border upon thoſe rivers that afford him food. The female lays four reddiſh-white eggs: the male partakes in the work of incubation, and never quits his mate but in ſearch of food, which he brings to her in the neſt. The whole family continues a long time together; nor do the young ſeparate from the old till they are ready to pair and provide a family for themſelves. Their long wings would ſeem to indicate that they are active in the chaſe; their flight is indeed extremely rapid; but Vaillant ſays he never ſaw them ſeize upon the birds they purſued, though ſometimes they ſtruck them with their bills, and made them cry out; but it appeared to be only for the purpoſe of driving intruders from the domain they had choſen for themſelves, and which they ſeldom quit.

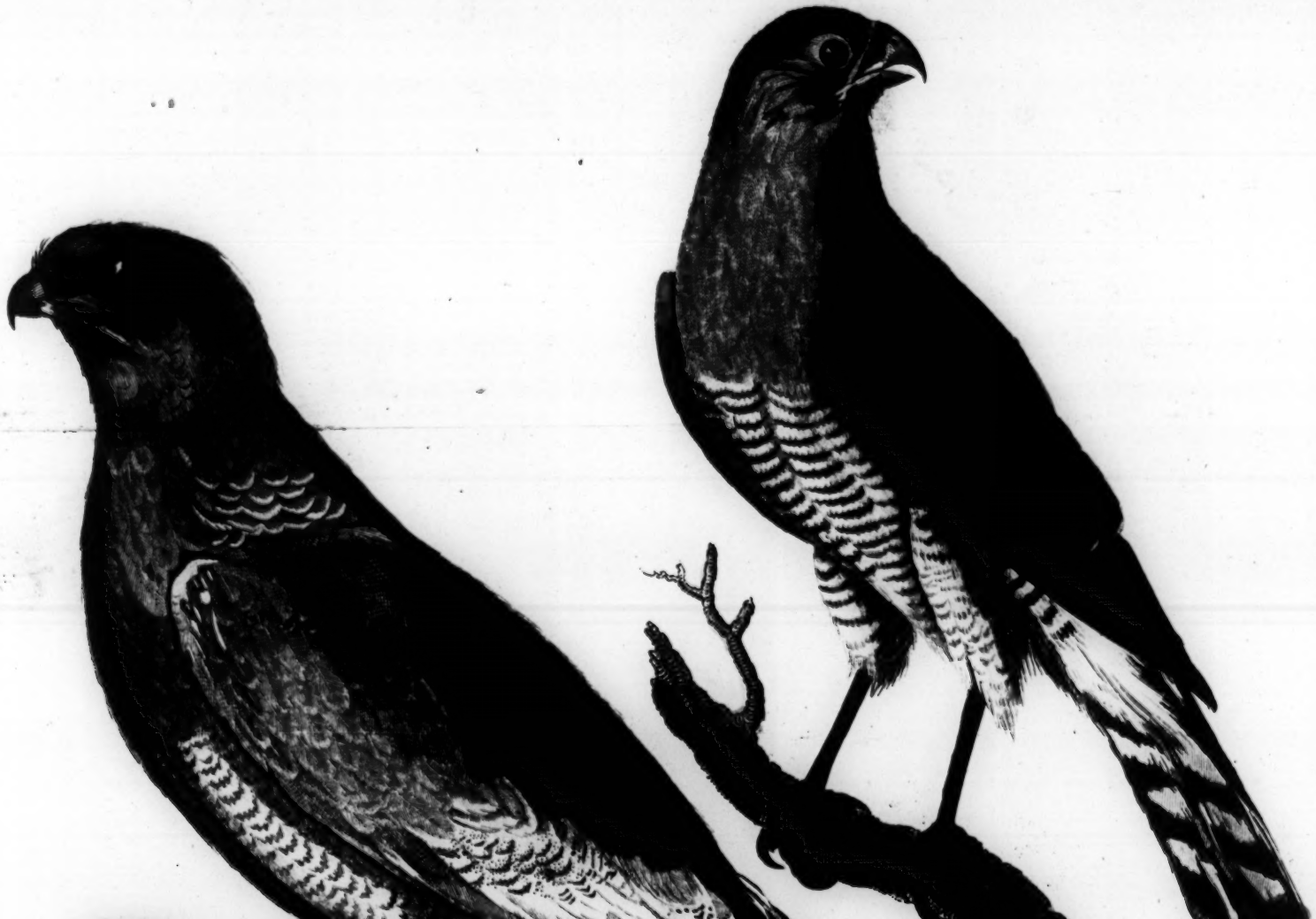
The

I. L. Reinold del.ᵗ

J. Pass sculp.ᵗ

The Singing Falcon, and African Sparrow-Hawk.

London. Published as the Act directs. Febʳʸ 16. 1803. by J. Wilkes.



The young ones have a fawn-coloured tint generally over all the plumage; the white on the throat, neck, and breaſt, is varied with dark grey and rufous. The creſt does not appear till ſome months after they have forſaken the neſt.—Falco piſcator var. *Ency. Lond.* Faucon huppé, *Vaillant*, N° 28. Faucon pecheur de Sénégal, *Buff.* Fiſhing falcon, *Latham.*

The SINGING FALCON.—Specific character, the baſe of the bill and the legs yellow, elegant plumage, and a continued ſong. Such are the marks of one of the moſt beautiful birds of prey in Africa. Except the noiſy eagle, before deſcribed, it is perhaps the only bird of prey that has a muſical note. At firſt ſight it might be taken for a ſpecies of ſparrow-hawk; but the wings are longer, the tail ſhorter, and the body thicker, in proportion. The tail is tapering, the exterior quills being one third ſhorter than the middle ones. The head, neck, breaſt, and all the upper ſurface of the body, are cinereous grey, darker on the top of the head, the cheeks, and part of the ſcapulars, which incline to brown. The upper tail-coverts are white; on the ſides they are ſtriped and dotted with brown. The belly is white, ſtriped faintly with light blue-grey; the ſtripes on the reſt of the body are more diſtinct. The large wing-quills are black. The tail-feathers are tipped with white; the middle ones black; the reſt have broad ſtripes or bands of white; the iris of the eye is dark red; the bill and nails black.

This ſpecies is the ſize of the common falcon. The female is one third larger. The baſe of the bill and the legs are of a fainter colour; they become brighter and deeper in the male in the ſeaſon of love. Then it is that he ſings, as moſt ſinging-birds do. Perched on a high tree with his female by his ſide, whom he does not quit through the whole year, or elſe near the neſt where ſhe is ſitting, he ſings for hours together in a very peculiar manner. Like the nightingale, he is heard at ſun-riſe, at ſun-ſet, and ſometimes all night.

In

In the midſt of his ſong he may be eaſily approached within gun-ſhot; but the fowler muſt be very careful to ſtand without the leaſt motion, if the bird ſtops to take breath; for at thoſe intervals the ſmalleſt noiſe will ſcare him away. He is very clear-ſighted; and, when perched on a lone tree, it is very difficult to approach him.

The ſinging falcon makes dreadful havock among hares, partridges, quails, &c. it will alſo eat moles, mice, and rats, having a moſt voracious appetite. The neſt is built on the forked branch of a tree, or in a thick buſh; the eggs are four in number, entirely white, and almoſt round. When boiled, the white preſerves an extraordinary tranſparency, with ſomewhat of a blue tint; the yolk is of a beautiful ſaffron colour; and the inſide of the ſhell green. The young birds have much rufous in their plumage.

This rare and beautiful ſpecies is found in Caffraria and the ſurrounding country; alſo in Karrow and Camdeboo. The male ſings only in the love-ſeaſon; and each ſtrain laſts about a minute. "I never heard the female ſing," ſays Vaillant; "but ſhe has a varied call. When I ſaw a pair of theſe birds, and happened to bring down the male, I was certain of having the female preſently; for, ſeeking the male with the greateſt anxiety and attachment, her continued and mournful call directed me every moment to the places ſhe was vainly ſeeking him in; and, diſregarding me, ſhe ſeemed to offer herſelf willingly to deſtruction. If, on the other hand, I ſhot the female firſt, the male kept the more on his guard; he would retire to a tree ſtanding by itſelf, and continue ſinging and calling day and night; and, if I kept purſuing him, he would leave that canton, and never return."—Falco cantor, the ſinging falcon, *Ency. Lond.* Faucon chanteur, *Vaillant*, N° 27.

The African Falcon.—This ſpecies is called by Vaillant *faucon à culotte noir*, the falcon with black plumage

plumage on the thighs. It is of an intermediate ſize between the two preceding. The wings reach about two thirds the length of the tail. The top of the head and the thighs are very dark brown; the wing and tail-feathers the ſame. but with a whitiſh edging which ſeparates them from each other. The throat is white; the mantle and wing-coverts dark grey, with ſome ſtrokes of a ſtill darker colour down the middle of each quill. The front part of the body is faint red, pencilled with brown ſpots; the lower belly and under tail-coverts the ſame, but the brown ſpots are fainter. The bill is formed as in the preceding ſpecies, yellow at the baſe, the reſt horn-colour. The toes are very ſtrong, and armed with black claws; the feet and legs are yellow; the feathers of the thighs hang ſomewhat below the knee. The eye is hazel-colour, and very briſk. The tail is rather rounded. Vaillant ſhot one while it was devouring a levret it had juſt killed. The ſpecies is ſaid to be pretty common on the Snow Mountains in Africa, where it is called "little cock of the mountain;" the coloniſts at the Cape call all the larger birds of prey, except vultures, cock of the mountain; and the ſmaller ones they call *valk*, or falcon.—Falco Africanus, *Ency. Lond.* Faucon à culotte noir, *Vaillant*, N° 29.

The CHICQUERA FALCON.—This ſmall bird of prey has the lower mandible formed like the two preceding. It reſembles the creſted fiſher-falcon in plumage, but it has no tuft. The ſpecies was firſt deſcribed by Vaillant; *chicquera* is the Indian name among the inhabitants of Chandernagore, where it was ſhot. The upper mandible is doubly notched. "The wings, in their natural poſition, reach about two thirds the length of the tail; the tail is ſomewhat tapered, and rounded;" theſe marks may be taken for the ſpecific character. The top of the head and back of the neck are of a dark ferruginous red; a ſlight tint of the ſame pervades the white of the breaſt, about the bill,

bill, front of the neck, and pinions of the wings. The under parts of the body conſiſt of dark-grey ſtreaks upon a white ground. The mantle is a light ſlate-colour, which is the ground-colour of all the wing and tail-feathers; they are moreover ſtriped tranſverſely: a broad black bar goes acroſs the end of the tail, but the tip is reddiſh white. The bill is pale yellow, but black at the tip; the feet and eyes a bright yellow. Its manner of living is not known.—Falco chicquera, *Ency. Lond.* Chicquera, *Vaillant*, N° 30.

The Brown Hawk.—Legs pale; head and body above brown, beneath white with yellow lunular ſpots; tail pale brown with four paler lines: thirteen inches long; bill blue, black at the tip; irids yellow; wing-coverts white at the edges; ſhoulders ſpotted with white; claws black. Inhabits Ceylon.—Falco badius, *Gmel.* Brown hawk, *Brown* and *Lath.*

The American Brown Hawk.—Cere cinereous; legs yellow; body waved with black, above aſhy-brown, beneath whitiſh. Size and appearance of the ſparrow-hawk; bill pale lead-colour; crown and ſides of the head with longitudinal white lines; belly reddiſh-brown; tail aſhy-brown with three tranſverſe pale brown ſtripes, tip paler, claws black. Inhabits America.—Falco fuſcus, *Gmel.* American brown hawk, *Lath.*

The Gabar, or African Sparrow-hawk.—This ſpecies much reſembles the finging falcon in plumage; but is about the ſize of the European ſparrow-hawk: its wings are very ſhort, not reaching beyond the upper tail-coverts; ſo that the African ſparrow-hawk is totally diſtinct from that of Europe, which Vaillant never met with in any part of Africa, though Kolbe ſays he ſaw it at the Cape. Strange it is indeed to obſerve, that, of all the European birds which Kolbe met with at the Cape, Vaillant never ſaw one; and of all theſe which Vaillant found to be common to both parts of the world, without the ſlighteſt variation

tion in colour or mode of living, Kolbe ſays not a word!

The gabar, as obſerved before, is about the ſize of the common ſparrow-hawk; but the tail is ſhorter, ſo that it has not ſo ſlender an appearance upon the whole. The upper ſurface of the body, head, and cheeks, are of a brown-grey, darker on the mantle and hind head. The tail-coverts, upper and under, are white; the large wing-quills are brown in the part which is viſible when they are folded; underneath they are tranſverſely ſtriped; and the middle feathers are tipped with white. The tail is ſquare, barred with dark brown on a lighter ground; beneath, white ſhaded with black. The throat and breaſts are bluiſh-grey; the reſt of the body and the tufted thighs are elegantly ſtriped with light brown on a whitiſh ground. The eyes are bright yellow; the baſe of the bill and the feet a beautiful red; the reſt of the bill and the claws are black. The female is one third larger than the male. The red is not ſo bright on her feet and bill; indeed during the rainy ſeaſon the red colour is not ſo ſtrong in the male as at other times.

Vaillant found a neſt of this ſpecies in September in the forked branch of a large mimoſa-tree; it was made of roots and flexible twigs, and lined with feathers; and contained three young ones as large as the parents; they flew away; but, having killed the old ones, the young were ſoon caught. Their feet and the baſe of the bill were yellow; the breaſt and mantle contained ſome brown feathers, ſome bluiſh, ſome reddiſh, and others had all thoſe colours intermixed. All the under parts of the body were ſtriped with fawn-colour on a white ground ſlightly tinged with red: one egg remained in the neſt, which which was white, and as large as that of the European ſparrow-hawk.

This ſpecies was not met with near the Cape, but in the interior of Africa, on the borders of the rivers Swart-koop and Sondag; in Karow, Camdeboo, and

between the Mountains of Snow and Boch-velt.—Falco niſus Africanus, *Ency. Lond.* Gabar, *Vaillant*, N° 33.

The Dwarf Hawk.—This African ſpecies, the ſmalleſt of this diviſion of birds of prey, being much ſmaller than the merlin, is called by Vaillant *le minulle*. Its proportions are the ſame, on a ſmall ſcale, as the ſparrow-hawk of Europe: the legs and thighs are very long; the wings hardly reach beyond the origin of the tail; the tail is ſquare; the firſt wing-quill is ſhorter than the fourth. All this agrees both with the ſparrow-hawk and this ſmall ſpecies; and may ſerve to diſtinguiſh it from the martin, for which it might be miſtaken upon a ſlight view, on account of its ſize.

The plumage of the whole upper ſurface appears brown when the feathers lie ſmooth and at reſt; but inſide they are ſpotted with white. The throat is white, with a few brown ſpots in the middle of each feather; the breaſt the ſame, the ſpots growing larger as they deſcend, and varying in ſhape; the ſides and thighs are regularly ſtriped with brown. The large quills are brown outwardly, ſtriped inwards with white; the mid-quills the ſame, except that the white is clearer, and the ſtripes broader. The ſmaller under wing-coverts have little brown ſpots on a rufous ground. The tail is brown, imperceptibly ſtriped with a darker tint; but, the inner barbs being whiter, the ſtripes are very viſible on the under part of the tail. The cere and feet are yellow; the eye orange-colour; the bill and claws black.

This ſpecies, though ſmall, has all the courage and voracity of its tribe. It will attack all kinds of ſmall birds; but, if it finds not birds for its purpoſe, it will feed on leſs delicate fare, as graſs-hoppers, beetles, and other inſects. It will ſuffer no butcher-bird within its reach; but drives away that fierce tribe from its domain; as it will alſo the kites and buzzards, being always

always ſure to eſcape, if hard preſſed, by the ſwiftneſs of its flight. The raven is the enemy againſt which it ſeems moſt implacable, when it has eggs to defend. The male purſues the raven, with the cry of *cree-cree-cree, pree-pree-pree*, like the note of the keſtrel. The male and female hunt together; they make their neſt on the top of the mimoſa-tree; the eggs are five in number, ſpotted with brown at the extremities: the neſt is formed of flexible twigs, moſs, and withered leaves; and carefully lined with wool and downy feathers.

This ſpecies Vaillant found on the verdant borders of the Gamtoo river, and thence quite to Caffraria. The male is about the ſize of the common black-bird, but the female is nearly twice as big. Her colours are the ſame, except that ſome parts of the mantle, and the ſtripes and ſpots on the breaſt, are ſomewhat fainter.

The following fact related by Vaillant will ſhow the boldneſs of this little bird. While he was preparing and ſtuffing dead birds on a table before his tent, one of theſe hawks flew over his head, and, obſerving ſeveral birds, made a pounce, and bore off a ſtuffed bird in his claws. He perched on a tree not thirty paces off, and preſently plumed his prey, but was greatly ſurpriſed and mortified no doubt to find the ſkin completely ſtuffed with moſs and wool. He ate the head however, the only part that was left; and, after having angrily torn the reſt to pieces, he came and hovered about the operator, but would not make another plunge, diſdaining perhaps to be cheated twice. —Falco minutus, *Ency. Lond.* Minulle, *Vaillant*, N° 34. Falco minullus, the dwarf hawk, *Lath.* and *Shaw.*

The DUBIOUS FALCON.—Cere and legs yellow; head duſky, with ruſty ſtreaks; body above brown, beneath dirty-white with brown ſtreaks; tail duſky-aſh with four black bands. Ten inches long; bill duſky; irids yellow; wing-coverts edged with ruſty;

primary tail-feathers duſky-aſh with white lines. Inhabits New York and Carolina.—Falco dubius, *Gmel.* Dubious falcon, *Penn.*

The Dusky Falcon.—Cere and legs yellow; hind-head and neck ſpotted with white; body above duſky brown, beneath white with black lines; tail with four broad and four narrow duſky bands and tipt with white. Bill bluiſh; head duſky brown; wing-coverts ſlightly edged with ferruginous; primary quill-feathers duſky. Inhabits New York.—Falco obſcurus, *Gmel.* Duſky falcon, *Pennant.*

The Guiana Falcon.—Cere, legs, and eye-lids yellow; body brown, waved with white; quill-feathers ruſty banded with black. Secondary tail-feathers whitiſh at the outer edge; tail black with two broad bands, tip cinereous; vent white with a few black ſtreaks; rump variegated black and white; eyebrows beneath naked, prominent; lores with black briſtles; bill and claws black; lower wing-coverts white with fine black lines. Size of a magpie. Inhabits Guiana and Surinam.—Falco ſuperciliоſus, *Gmel.* Guiana falcon, *Lath.*

The Ingrian Falcon.—Cere, legs, and eyelids, yellow; vent and thighs ruſty. Size of a pigeon; body bluiſh-brown; belly bluiſh-white; head brown; bill yellow, brown at the tip; tail-feathers twelve, brown each ſide; quill-feathers bluiſh-white, the firſt ſeven blackiſh at the tip; legs naked. Inhabits Ingria and other parts of Ruſſia and Siberia; builds on the top branches of trees, or takes poſſeſſion of the magpie's neſt; preys on quails, and goes abroad chiefly in the evening and at night.—Falco veſpertinus, *Gmel.* from *S. G. Gmel.* and *Lepechin.* Ingrian falcon, *Lath.*

The Permian Falcon.—Cere, legs, and eyelids, yellow; thighs black; neck, breaſt, and belly, browniſh ſpotted with white. A very ſmall ſpecies. Inhabits Permia and Siberia.—Falco veſpertinoides, *Gmel.* from *Falck.* Permian falcon, *Turton.*

The

The CRIAD FALCON.—Legs yellow; body greyaſh, beneath white; wing-coverts black. Size of a pigeon; preys on frogs. Irids yellow; orbits red, naked; eyelids with laſhes. Inhabits India. Added by Turton, from Smellie.—Falco vociferus, the criad falcon, *Turton.*

The JOHANNA FALCON.—Legs yellow; body ruſty with ſmall linear black ſpots; chin yellow; quill-feathers blackiſh-brown; tail white, wedged. Bill black, lower mandible yellow at the baſe. Inhabits Johanna iſland. Added by Turton.—Falco Johannenſis, the Johanna falcon, *Turton.*

The ORANGE-BREASTED HOBBY.—Bill and legs lead-colour; body duſky-brown with narrow whitiſh lines croſſing each other; chin with long narrow whitiſh feathers; throat and breaſt orange; belly and tail with brown interrupted ſtreaks. Bill whitiſh at the baſe; throat with round white ſpots; lower tail-coverts ruſty; tail towards the tip with white lines; legs long, ſlender; claws black. Inhabits Surinam; fifteen inches long.

There are two varieties: 1. With ſtreaks on the body more duſky; chin white; throat orange; ten inches long. 2. Legs tawny; body above bluiſh-black with bluiſh ſtreaks, beneath ſtreaked with white. Size of the laſt: belly, vent, and thighs, reddiſh; chin and throat reddiſh with a white ſpot in the middle.—Falco aurantius, *Gmel.* Orange-breaſted hobby, *Lath.*

The LEAD-COLOURED HOBBY.—Cere duſky; legs yellow; body cinereous, upper parts of the back black-lead colour; tail-feathers underneath with three white ſpots. Bill and claws black; head and neck cinereous; legs ſhort. Inhabits Cayenne: ſize of the ſparrow-hawk.—Falco plumbeus, *Gmel.* Spotted-tailed hobby, *Lath.* Lead-coloured hobby, *Ency. Lond.*

The LITTLE HAWK.—Cere yellow; head brown; crown and belly red; wings bluiſh. Bill and irids yellowiſh; head lue-aſh; crown, body above, and wing-

wing-coverts, brown-orange with tranſverſe black ſtreaks; tail red-brown dotted with black; legs yellow; head of the female ſurrounded with ſeven blackiſh ſpots. Inhabits Virginia, Carolina, and St. Domingo: length eleven inches.—Falco ſparverius, *Gmel.* F. minor rufeſcens, *Brown.* Aeſalon Cardinenſis, *Briſſ.* Emerillon de la Caroline, *Buff.* Little hawk, *Cateſby.* Little falcon, *Penn.* and *Lath.*

The Domingo Falcon.—Cere and legs yellow; head cinereous; body above red-brown, beneath dirty-white, both ſpotted with black; eight middle tail-feathers cheſnut, towards the tip black, white at the extremity. Bill yellow, black at the tip, irids yellow; outer tail-feathers of the male white on the outſide and tips, inſide cheſnut with a tranſverſe black ſpot towards the tips, of the female, outſide white with five black ſpots, inſide cheſnut, the ſecondaries whitiſh near the tip with a black ſpot; claws black. Inhabits St. Domingo. — Falco Dominicenſis, *Gmel.* Emerillon de St. Domingue, *Briſſ.* St. Domingo falcon, *Latham.*

The Minute Falcon.—Cere brown; legs yellow; body beneath white; tail-feathers brown; banded with black. Bill and claws black; body above brown varied with rufous, beneath with tranſverſe browniſh-red ſtreaks; belly ſometimes with lanceolate ſpots. Inhabits Malta, rarely England: eleven inches long.—Falco minutus, *Gmel.* Accipiter minor, *Briſſ.* Minute falcon, *Turton.*

The Bengal Falcon.—Cere, eyelids, legs, and body beneath, yellow; back, bluiſh-black; temples ſurrounded by a white line. Bill blackiſh; fore-part of the head white; area of the eyes naked, yellow; cheeks white with a black line; two middle tail-feathers uniform, the reſt beneath with tranſverſe white ſtreaks; claws blackiſh. Inhabits Bengal; ſix inches and a half long.—Falco caruleſcens, *Gmel.* Faucon

de

de Bengale, *Briſſ.* Little black-and-orange Indian hawk, *Edw.* Bengal falcon, *Lath.*

The SIBERIAN FALCON. Cere greeniſh; legs duſky-yellow; ruff ferruginous; body above lead-colour, beneath whitiſh with ruſty ſpots. Irides brown; crown brown with blackiſh lines; wings white at the edges, varying underneath; tail-feathers lead-colour towards the tip, beneath pale bands, edges black, tips white. Inhabits Siberia; a little leſs than the laſt: very rare.—Falco regulus, *Gmel.* F. cera vireſcente, *Pall.* Siberian falcon, *Lath.*

The TINY FALCON.—Legs yellow; body brownaſh, beneath whitiſh with blackiſh bars; crown whitiſh. Inhabits Cayenne; hardly ſix inches long. This concluding ſpecies is added by Dr. Turton, in his late tranſlation of Gmelin's laſt edition of Linnæus's Syſtema Naturæ. While we acknowledge ourſelves indebted to that tranſlation for ſeveral new ſpecies, we muſt lament that the doctor ſhould have ſo greatly leſſened its uſefulneſs, by omitting the ſynonymes and authorities.—Falco pumilus, the tiny falcon, *Turton.*

STRIX, THE OWL.

The GREAT HORNED OWL of the CAPE.—Vaillant conſiders this as a variety of the Strix bubo, or great horned owl of Europe; which ſee deſcribed at vol. iv. p. 153. A tuft of feathers riſes on each ſide of the forehead, exactly over each eye, which ſome have likened to ears, ſome to horns, which the birds can erect at pleaſure; but Vaillant ſays they generally lie flat upon the head. Theſe tufts are the diſtinction by which thoſe ſpecies are known which the French, on account of their "exceeding grave formality," have dignified with the name of *duke*, of theſe there are three; the *grand duke*, which we are now treating of; the *middle duke*, Strix otus, which we call the long-eared owl, though its ears are much ſhorter than the firſt; and the *little duke*, or ſcops. Theſe are all found

found in Africa, and throughout the whole of the ancient continent; and their colours have been very little changed by the climate, the difference not appearing greater than between individuals killed in the ſame country. The *ſcops* he obſerved at Camdeboo; and the *otus* throughout the colony at the Cape, where it neſtles among the rocks, but is ſometimes ſeen abroad in the day-time.—Strix bubo, *Linn.* and *Gmel.* Grand duc, *Buff.* and *Vaillant's African Birds*, N° 40.

The Ceylon Owl.—Body above reddiſh-brown, beneath yellowiſh-white; circles on the face reddiſh-brown ſtreaked with black. Bill corneous; irids yellow; ears ſhort, acute; firſt quill-feathers and tail with tranſverſe black, white, and pale-red, lines; legs half naked. Inhabits Ceylon; nearly two feet long. —Strix Zeylonenſis, *Gmel.* Ceyloneſe eagle-owl, *Latham.*

The Chineſe Owl.—Body reddiſh-brown with waved black lines, beneath ſtreaked with reddiſh-black and barred with white. Bill and legs black; ſecondary quill-feathers with four blackiſh bars. Inhabits China; fourteen inches long. Strix Sinenſis, *Turton's Linn.*

The Coromandel Owl.—Body above greyiſh-red with reddiſh white ſpots, beneath pale red with ſmall ſemilunar black ſpots. Bill black; irids yellow; legs reddiſh; cheeks white; quill and tail-feathers barred with reddiſh-white. Inhabits India; ſmaller than the preceding.—Strix Coromanda, *Turton.*

The Red Owl.—Body above ferruginous, beneath cinereous; wings with five white dots. Body ſtriped above, ſpotted beneath with black; primary quill-feathers with black, red, and white, lines; tail rufous with duſky bars; legs feathered down to the toes. Inhabits North America; ten inches and a half long. —Strix aſio, *Gmel.* Scops Carolinienſis, *Briſſ.* Little owl, *Cateſby.* Red owl, *Penn.* The

The MEXICAN OWL.—Body variegated with brown and black; eyes large; irids golden. Inhabits Mexico.—Strix Mexicana, *Gmel.* Aſio Mexicanus, *Briſſ.* Tecolotl, *Ray.* Mexican eared owl, *Latham.*

The AMERICAN OWL.—Head and body above cinereous, beneath ruſty; rump white, ſpotted with black; wings and tail ruſty, with cinereous and grey tranſverſe lines. Bill yellow; irids golden; orbits aſh; legs yellow; claws black. Inhabits North America; fourteeninches long.—Strix Americana, *Gmel.* Aſio Americanus, *Briſſ.* Bubo ocro-cinereus, *Feuillé.*

The SHORT-EARED OWL.—Ears ſhort; body above brown, the feathers edged with yellow; beneath pale yellow longitudinally ſtreaked with duſky. Tail duſky-brown, the middle feathers with a yellow circle; feathers of the legs yellow. Inhabits Europe, America, and Siberia; fourteen inches long; watches for mice in barns.—Strix brachyotus, *Gmel.* Chouette, ou grande cheveche, *Buff.* and *Will.* Short-eared owl. *Penn.* and *Lath.*

The MOTTLED OWL.—Body grey, beneath paler, both ſpotted with black and ruſty; feathers of the head and breaſt dotted with black. Face white ſpotted with brown; ſhoulders and wing-coverts with large white ſpots; primary quill-feathers ſpotted with black and pale ruſty. Inhabits New York; eleven inches long.—Strix nævia, *Gmel.* Mottled owl, *Penn.* and *Lath.*

The INDIAN OWL.—Back duſky; wing-coverts grey with black lines; breaſt buff with ſmall arrow-ſhaped ſpots. Bill duſky, ſurrounded with long briſtles; head duſky-brown; orbits pale-aſh; legs half naked, beneath reddiſh-yellow: ears duſky on the inner and white on the outer ſides: irids ſcarlet. Inhabits Ceylon; ſeven inches long.—Strix Indica, *Gmel.* Little hawk-owl of Ceylon, *Penn.* Indian eared owl, *Latham.*

The SARDINIAN OWL.—Feathers of the ears

eight or nine; bill greeniſh-yellow. Inhabits Sardinia and Italy; ſeven inches long; ſolitary, does not migrate, makes a howling noiſe.—Strix zorca, *Gmel.* from *Cetti.*

The CARNIOLA OWL.—Body whitiſh-aſh, with blackiſh ſpots and tranſverſe ſtripes. Irids yellow; tail ſpotted with browniſh; ſix firſt quill-feathers ſpotted with whitiſh on one ſide. Inhabits Carniola; makes its neſt in rocks and hollow trees; eight inches long.—Strix Carniolica, *Gmel.* from *Scopoli.*

The YAIK OWL.—Body red; of ſmall ſize. Inhabits foreſts upon the Ural; reſembles the bubo in colour and form, but much leſs; hardly weighs a pound; builds its neſt in fiſſures of rocks and hollow trees.—Strix diminuta, *Gmel.* from *Pallas.* Yaikan eagle-owl, *Latham.*

The SIBERIAN OWL.—Body grey variegated with brown, ruſty and white. Bill, legs, and claws, dirty whitiſh; irids yellow; back dirty-aſh; wings with oblong white ſpots; tail reddiſh with brown ſtreaks and dots. Inhabits Siberia; nine inches long.—Strix pulchella, *Gmel.* from *Pallas.* Siberian eared owl, *Latham.* This is the laſt of the *Eared Owls*, except the *ſcops*, which bas been already deſcribed, vol. iv. p. 161.

The WHITE-TUFTED OWL. The tufts in this ſpecies ariſe from the bill, but do not ſtand erect like ears or horns, as in the firſt diviſion. They paſs over the eyes, and fall down very low upon the back of the neck; being compoſed of flexible feathers of various lengths, but of a ſnowy whiteneſs. It is a rare ſpecies, lately brought from Cayenne, or Guiana; and is about the ſize of the Strix otus, or long-eared owl. The bill is yellow, the nails brown. The wings when at reſt reach to about the middle of the tail, which is rounded at the end. The legs are covered with feathers, which reach as far as the firſt joint of the toes. The under part of the body, from the throat to the under

under tail-coverts, has faint brown ſtripes on a whitiſh ground, clouded in ſome parts with rufous. The upper ſurface of the body is moſtly of a reddiſh brown faintly ſtriped with a duller brown, and occaſionally relieved with white ſpots, which moſtly appear on the wing-coverts and towards the end of the tail. The colour of the eyes is not known.—Chouette à aigrette blanche, *Vaillant*, N° 43.

RAYE'S WHITE OWL.—This name we have aſſumed to diſtinguiſh this ſpecies from the other white owls, of which we have already three, the *nyctea*, the *alba*, and the *flammea*. It was deſcribed from the cabinet of M. Raye de Breukeleward, of Amſterdam. It has no riſing tufts; the wings reach ſeveral inches below the tail; the head is very large. This ſpecies is not ſo big as the harfang, or great white owl, Strix nyctea; it is nearly of the ſize of the great horned owl, Strix bubo, but is ſhorter and thicker. Theſe remarks will be ſufficient to prevent its being confounded with any ſpecies hitherto known. The plumage is of a ſnowy white, with a very few black ſpots upon the wing-coverts and two large quills. The feet and toes are ſo completely covered with downy feathers, that only the ends of the claws are viſible; theſe are black, as is the bill. Its country is not known, but Vaillant ſuppoſes it to inhabit a cold climate.—Chouette blanche, *Vaillant*, N° 45.

The SWEDISH OWL.—Body grey, with ſmall round ſpots. Bill duſky with a white tip, and a black line from the baſe to the eye each ſide; eyes clouded with duſky, and ſurrounded with a circle of white feathers; head grey ſtriped with white, ſurrounded by a duſky collar ſpotted with white; breaſt and belly white blotched with duſky; primary quill-feathers duſky with white bars; tail duſky-grey with white ſtripes. —Strix tengmalmi, *Gmel.* from *Act Stockh.* Swediſh owl, *Turton.*

The BARRED OWL.—Head, neck, breaſt, back, and wing-coverts, brown ſpotted with white; belly

and vent dirty-white ſtreaked with brown; tail with brown and whitiſh bands, whitiſh at the tip. Bill and irids yellow; eyes ſurrounded by a whitiſh circle; primary quill-feathers barred with black and white; legs and toes feathered with whitiſh; wings ſhorter than the tail. Inhabits Hudſon's Bay, New York, rarely England; two feet long; feeds on hares, mice, and cranes.—Strix nebuloſa, *Gmel.* from *Phil. Tranſ.* lxii. Barred-owl, *Penn.* and *Lath.*

The Collared Owl.—This is another American ſpecies, and very little known. It is one of the largeſt of the genus, being in ſize between the great horned owl and the *aluco*, or black owl. Its large eye-brows are white, and greatly encroach upon the brown colour of the face. The reſt of the face and moſt of the upper ſurface of the body, are chocolate-colour; the ſcapulars and wing-coverts have ſome ſtreaks of light grey. A large brown collar or necklace falls down upon the breaſt. The throat, front of the neck, ſides, and under tail-coverts, are white, with brown bars acroſs the tail. The legs and feet are entirely covered with ſhining white down. It ſtands twenty-two inches high. The bill is yellow at the tip, and bluiſh at the baſe; the claws are black. This is all we know of this bird, except that it was killed on a plantation near Surinam in Guiana.—Chouette à collier, *Vaill.* N° 42. Perhaps the Strix perſpicillata, or ſpectacle owl, of *Turton's Linn.*

The Sooty Owl.—Head, neck, and wing-coverts, ſooty, with dirty-white lines; breaſt and belly whitiſh, with large oblong duſky-brown ſpots. Bill whitiſh; irids yellow; tail with oblique and dirty-white ſtreaks; a part of the ſkin from the chin to the vent bare of feathers. Inhabits Hudſon's Bay; two feet long; flies in pairs, and preys on mice and hares.—Strix cinerea, *Gmel.* Sooty owl, *Penn.* and *Turton.* Cinereous owl, *Latham.*

The Spotted Owl. — Back and tail-coverts white ſpotted with duſky: breaſt and belly dirty-white

white with reddiſh lines croſſing each other. Bill and claws black, hooked; irids yellow; ſpace between the eyes, cheeks, and chin, white; feathers of the head black at the tip; ſhoulders and wing-coverts white with reddiſh ſpots; vent white. Inhabits Hudſon's Bay: two feet long; forms its neſt of moſs on the ground; preys on mice and ſmall birds; fleſh good. —Strix wapacuthu, *Gmel.* from *Penn.* Spotted owl, *Turton.*

The COQUIMBO OWL.—Body above brown, beneath white; legs warty, hairy. Irids yellow; body above ſpotted with white. Inhabits Chili; ſize of a pigeon; flies in pairs, ſometimes by day; preys on inſects and reptiles; lays four eggs, variegated with white and yellow, in long ſubterraneous burrows.—Strix cunicularia, *Gmel.* from *Molini.* Noctua coquimbanos, *Briſſ.* Coquimbo owl, *Latham.*

The AUSTRIAN OWL.—Body variegated white and brown; ſpace round the eyes white; irids red. Inhabits Auſtria; ſize of a fowl; covering of the head with an elegant radiant wreath of white feathers from ear to ear.—Strix ſylveſtris, *Gmel.* from *Scopoli.* Auſtrian owl, *Latham.*

The WHITE AUSTRIAN OWL.—Body above tawny ſpotted with grey, beneath white; quill and tail-feathers rufous, the latter tipt with white. Bill white; covering of the head with a reddiſh border. Inhabits Auſtria; ſize of the laſt.—Strix alba, *Gmel.* from *Scop.* White Auſtrian owl, *Latham.*

The RUFOUS OWL.—Body pale rufous with longitudinal brown ſpots; irids brown. Inhabits Auſtria; ſize of a pigeon.—Strix noctua, *Gmel.* from *Scop.* Rufous Auſtrian owl, *Latham.*

The FERRUGINOUS OWL.—Body ruſty ſpotted with brown; irids bluiſh. Inhabits the woods of Idria; ſize of the laſt—Strix rufa, *Gmel.* from *Scop.* Ferruginous Auſtrian owl, *Latham.*

The SOLONESE OWL.—Body above black-brown mixed with tawney, beneath white, with blackiſh lines croſſing

croſſing each other near the tip. Crown and outer circle of feathers round the face varied with reddiſh and white; toes horn-colour. Inhabits France, fifteen inches long.—Strix Solonienſis, *Gmel.* Soloneſe owl, *Latham.*

The Common White Owl.—This ſpecies, already deſcribed, vol. iv. p. 166. is ſlightly noticed by Vaillant, as being at the Cape, where it has varied as little as any of thoſe we have before ſpoken of. The differences of age and ſex are preciſely the ſame as in theſe comparatively-cold countries. The young male has the under part of the body and face rufous; the young female the ſame, with lines of black underneath. The full-grown male has the under part of the body of a fine white, which in the female is varied with long black ſpots. Inſtead of old towers and church-ſteeples, the white owl in Africa lays her eggs in holes of the rocks on a heap of dried leaves; the eggs are white, and ſeven or eight in number. This bird is ſeldom ſeen in the day; but at night flies about, and reaches the towns and inhabited places neareſt to its own neſt. The coloniſts, who have carried into Africa the fooliſh prejudices of Europe, call it *dood-vogel*, or death-bird. Vaillant ſhot ſome of this ſpecies at the Cape; others in the Great Namaquois country; others he received from Senegal, South America, and China, and one from Ruſſia; there was no ſenſible variation in theſe, though from climates ſo diſſimilar.

The Mountain Owl.—Space round the eyes and chin black. Bill and irids yellow; body cinereous; primary quill-feathers ſerrate on both edges. Inhabits mountains of Siberia.—Strix barbata, the mountain owl, *Turton.*

The Arctic Owl.—Body ruſty-brown, above ſpotted with black, beneath ſtreaked with narrow brown lines; bill, orbits, and band under the wings, brown. Irids yellow; tail barred with black and ruſty; legs white; claws black. Inhabits northern Sweden; eighteen inches long.—Strix arctica, *Turton.*

The

The HAWK OWL.—Feathers above brown with white edges, beneath white with tranſverſe black lines; bill and irids golden. Crown brown ſpotted with white; face white mixed with brown edged with black; rump brown with pale bands; tail and wings long. Inhabits Hudſon's Bay; thirteen inches long; preys by day.—Strix Hudſonia, *Gmel.* Caparacoch, *Buff.* Little hawk-owl, *Edwards.* Hawk-owl, *Latham.*

The URAL OWL.—Body whitiſh, with longitudinal brown ſpots in the middle of each feather. Bill wax-colour; irids and eye-lids black; orbits aſh; rump white; tail long, wedged. Inhabits mountains of Ural in Siberia; ſize of a hen.—Strix Uralenſis, *Gmel.* from *Lepechin.* Chouette à longue queue de Sibérie, *Buff.* Ural owl, *Lath.*

The AFRICAN LONG-TAILED OWL.—This bird ſeems to occupy the ſpace between the diurnal birds of prey and the nocturnal. Edwards firſt deſcribed a bird of this kind under the name of caparacox of Hudſon's Bay, or hawk-owl, *Strix Hudſonia;* Buffon has one ſomewhat ſimilar, the long-tailed Siberian owl, *Strix Uralenſis;* which ſtill more reſembles the ſubject under conſideration. See the two preceding ſpecies.

The preſent ſpecies is of a lengthened ſhape, and more like the birds who hunt in open day than the hawk-owl. The throat, neck, and breaſt, and the whole under part of the body, from the bill to the tail, including the wings, thighs, legs, and toes, are covered with ſilky feathers of a ſhining white; only the nails are viſible, which are black; ſo is the bill, which is hardly viſible, being ſo beſet, as far as the noſtrils, with thin feathers like hairs. The eyes are of a bright orange-colour. The head, hinder part of the neck, and mantle, are reddiſh brown, the wing-coverts the ſame with white ſpots; all the wing-quills are tipped with white. The tail is compoſed of twelve quills; the two middle ones of the ſame colour with the wings, the reſt barred with white on their

their outer barbs; the interior barbs are white without any ſtripe or ſpot, ſo that the under ſurface of the tail is entirely white.

This ſpecies has a long, thin, ſlender body; head round, bill very ſmall, and legs ſhort. It has the geſtures and motions of the head common to our owls, but without their ſtupidity. The wing, when folded in, reaches to the middle of the tail, which is very long and tapered, like the European cuckoo, which bird it farther reſembles in its long body and ſhort legs. As young cuckoos have ſometimes been miſtaken for hawks, (ſee vol. iv. p. 434.) and might be eaſily confounded with this ſpecies of owl, we ſhall juſt mention, that this owl has but one hind toe and three in front, whereas in the cuckoo the toes are diſpoſed two backwards and two forwards. Yet ſometimes, when the birds are perched, the poſition of the toes is otherwiſe, as one of the hinder ones will turn before, and vice-verſa; ſo that great attention and cloſe examination are neceſſary to prevent miſtakes; and perſons who prepare birds for preſervation in cabinets often blunder in fixing the legs and toes.

This bird is called in the Auteniquois country, Africa, *nagt-valk*, night hawk; we have before remarked, that at the Cape all the ſmaller birds of prey are called hawks. It never appears till the twilight fades into total darkneſs, and till objects are hardly diſtinguiſhable by the eye of man. The other birds of night are heard long before this leaves its hiding-place. It flies ſo ſwiftly, ſkimming the earth and trees on the ſkirts of a wood, that the moſt attentive eye can by no means follow its motions; hence Vaillant was never able to bring one down, though he fired at the ſame pair of birds more than three hundred times in the ſpace of a month; he caught them, at length, by mere accident, in a net which was hung out to dry; they refuſed all food that was offered them, and died in three days. He caught another couple afterwards in the ſame manner. The

The female is ſomewhat ſmaller than the male; the white underneath the body is not ſo clear. "I found nothing in their ſtomachs," ſays Vaillant, "but the remains of inſects, and the bones of a ſmall kind of frog very common upon trees and buſhes in Africa. (See an account of the *tree-frogs*, vol. xii. p. 194.) I never ſaw or heard it but in the night; ſo that it cannot be Edward's hawk-owl, Strix Hudſonia, which that writer ſays purſues its flight and chaſe in broad day-light. I never was able to diſcover one of them in the day-time, though I often ſought for them, and frequently ſucceeded in raiſing other night-birds; which proves how carefully they hide themſelves. No doubt they conceal themſelves in the holes of trees; and there in all probability they neſtle and lay their eggs, which the Hottentots ſay are white. I cannot aſſert this of myſelf, never having ſeen a neſt; but I have no doubt, from a peculiar ſmell which all birds have who live in holes, that theſe are of that concealed race. Let any one ſmell at a wood-pecker, and then at another bird, and he will be convinced of the truth of my obſervation. Sea-fowl have a very ſtrong oily ſmell; the bee-eaters have an agreeable odour; and the king-fiſher ſmells of raw fiſh. Theſe remarks can hold good only of living birds, or thoſe newly killed; for, as to the ſtuffed ones, it muſt be evident, that the camphor and other drugs uſed in preparing them muſt have changed entirely their natural odour."

Vaillant found this ſpecies in the Auteniquois country only. It is very noiſy while on the wing; inceſſantly crying with a ſharp tone *cree-cree-cree, cree-cree-cree, cree-cree-cree;* eſpecially when it paſſes by a man or any animal. They are not ſhy; Vaillant ſays they flew often ſo near him, that he felt the wind from their wings. The pair which he kept three days in a cage were very quiet during the day; but they were noiſy enough all night. Day-light ſeemed to diſtreſs them much; if

placed in the ſun, they would preſently ſhut their eyes and hide their heads.—Choucou, *Vaillant*, N° 38.

The Choucouhou.—This African bird has a longer tail than the owls in general, and tapered like the preceding ſpecies. The head is not ſo large in proportion as in ſome of the owls: the bill is ſmall, and almoſt concealed by thoſe ſmall feathers which entirely cover the noſtrils. It is longer and ſlenderer in ſhape than the common owls, and therefore naturally follows the choucou, which is ſlenderer ſtill. It is about the ſize of the Strix otus, or long-eared owl, but longer, and with longer legs. The wings reach three fourths of the length of the tail. The legs and feet are covered with very fine ſilky feathers of a light grey colour. The bill and nails are almoſt black; the eyes are dark topaz-colour. A kind of white collar or gorget appears on the throat. The reſt of the plumage is agreeably diverſified with various ſhades of brown, ſometimes in their inflexions mingled with white. The ſame colours prevail on the breaſt and under parts of the body, but more regularly diſpoſed in feſtoons, and becoming whiter towards the belly and legs. The tail is ſtriped underneath with dark brown and reddiſh-white: on the upper ſurface, the white is clearer, the brown not ſo dark.

This ſpecies is found only in thoſe parts of Africa bordering on the Orange-river, and in the great Namaquois, where it is pretty common. Though by choice it only flies by night, yet it can make its way well enough by day-light, if it happens to be fluſhed by the ſound of a muſket, or driven from its perch by the approach of an enemy. Vaillant thinks that it hunts only in the evening and at the peep of day. Having met with one about noon, he obſerved that the little birds attacked and purſued it till it got to a hiding-place, the owl making no reſiſtance, but flying before them, emitting now and then a mournful cry, ſimilar to that for which the Strix flammea, or white owl,

owl, is ſo remarkable; and alſo a ſingular and loud cracking with the bill. The female is rather larger than the male; but differs little in plumage, the white only being not ſo bright, and the eyes not ſo dark. "When our fires were lighted in the evening," ſays Vaillant, "they came flying over the place where we were encamped, and by their diſmal notes ſometimes prevented us from ſleeping. But we could eaſily kill them by the light of a fire, or of the moon. I have not been able to learn any thing certain concerning the ſtructure of their neſt, &c."—Choucouhou, *Vaillant*, N° 39.

The DAY OWL.—This beautiful ſpecies belongs to the new continent of South America. Vaillant received it from Cayenne; its name was ticketed *day-owl*, which indicates that it flies and hunts in the open day. Indeed it bears a greater ſimilarity to the diurnal birds of prey than the choucouhou. Its tail is rounded, and too long for an owl; the head is ſmaller, and the beak more apparent, the noſtrils being bare, or only a little ſhaded by a few hairs growing forward. The wings reach ſomewhat lower than the middle of the tail; the tail is more than two-thirds the length of the bird, which is about the ſize of the brown owl of Europe, Strix ulula. The bill, feet, and claws, are yellow; the plumage is black in general, but richly variegated with white ſcallops, broader on the lower and under parts of the body than on the neck and back; the top of the head is dotted with white; the feathers on the legs are black, with white ſpots; the feathers reach quite to the origin of the toes, and ſpread ſome way down the middle toe; giving the appearance of a pair of mittens, or gloves without fingers. The wings are chocolate-colour; the ſmall wing-coverts tipped with white. The tail is of a darker brown than the wings, and ſomewhat tapered; each feather is tipped with white, and tranſverſely barred with three white ſtripes; but, as the ſtripes are not in the ſame parts of each feather, the

whole has the appearance of dark marble with thick white veins. As this bird was not received alive, little more can be ſaid of it. It is probable that it came from the very interior parts of Cayenne, as moſt of the birds of that country have been known long ſince.—Huhul, *Vaillant*, N° 41.

The CASPIAN OWL.—Body above yellowiſh, beneath yellowiſh-white, both ſides with longitudinal blackiſh ſtreaks, belly dotted with black; irids citron. Bill black; wings beneath and vent white; quill-feathers outſide yellowiſh, within white teſſelate with black; tail rounded, ſhorter than the wings, blackiſh, barred with white, and whitiſh at the ſides. Inhabits near the Caſpian Sea; fourteen inches long.—Strix accipitrina, *Gmel.* from *Pallas.* Caſpian owl, *Latham.*

The JAVAN OWL.—Body cinereous, in a few places reddiſh with black and white ſpots; beneath dirty-white mixed with reddiſh and black ſpots.—Strix Javanica, *Gmel.* from *Wurmb. ap. Lichtenberg Mag.*

The NEW ZEALAND OWL.—Irids yellow; body above brown ſpotted with white, beneath tawny. Inhabits New-Zealand; eleven inches long: bill horny with a black tip.—Strix Novæ Seelandiæ, *Gmel.* New Zealand owl, *Latham.*

The NEW SPAIN OWL.—Irids pale yellow; body above variegated with black, pale yellow, white, and tawny; beneath white. Bill, claws, and lower wing-coverts, black. Inhabits New Spain.—Strix tolchiquatli, *Gmel.* from *Ray.* Chouette du Mexique, *Briſſ.* New Spain owl, *Lath.*

The MEXICAN OWL.—Body tawny variegated with brown and black; eyes black, eyelids blue. Inhabits New Spain; ſize of a hen.—Strix chichiotli, *Gmel.* from *Ray.* Chat-huant du Mexique, *Briſſ.* Mexican owl, *Latham.*

The ACADIAN OWL.—Body above bright bay ſpotted with white; beneath dirty white mixed with ruſty.

ruſty. Bill brown; irids yellow; crown with pale ſpots; orbits cinereous; toes brown. Inhabits North America; ſeven inches long.—Strix acadica, *Gmel.* Acadian owl, *Latham.*

The WHITE-FRONTED OWL.—Body ruſty-brown, beneath paler; forehead white; quill-feathers barred with black and white. Bill bluiſh tipt with black; irids yellow; a ſemicircular white line behind the ears to the crown; lower part of the belly and legs cinereous; claws black. Inhabits North America; five inches long.—Strix albifrons, *Turton.*

The SMALLEST OWL.—This is the ſmalleſt ſpecies known; it is leſs than the *ſcops*, which it reſembles in plumage, but has no horns. The bill is yellow; the nails almoſt black. From the origin of the bill and from the throat ariſe ſome ſtiff hairs, growing outwards. The wings reach very little beyond the origin of the tail. The tail is pretty long, conſidering the ſize of the bird; and this may ſerve to diſtinguiſh it from the *paſſerina*, or little owl, which has a very ſhort tail, and wings reaching to the end of it. The ground-colour of the plumage is dull brown on the head, wings, and tail; which colour is enlivened by a great number of white ſpots, very ſmall on the forehead and cheeks, but larger on the wings; there are four white bars acroſs the tail. The throat, front of the neck, belly, and under tail-coverts, are white, with light-brown ſpots; the breaſt and ſternum brown varied with dirty white. The legs, feet, and toes, entirely covered with feathers. Its country is not known.—Chevechette, *Vaillant*, N° 46.

The PEARLED OWL.—This pretty little African ſpecies ſomewhat reſembles the preceding; its colours are however very different. The general ground-colour of the plumage is rufous; and there are a number of white ſpots encircled with black about the head and back of the neck, like ſo many pearls; and ſimilar ſpots, but larger, are ſeen upon the wings and tail. The cheeks and throat are white, with ſome undula-

undulations of black on the front of the neck, which lower down forms a kind of necklace, that extends on the ſides to mark the inſertion of the pinions, while the wings are at reſt. The breaſt is marked with dark-brown patches on a rufous ground, as the reſt of the under parts are with dark red on a white ground. The wing-feathers are blackiſh, with reddiſh bars inſide, and edged outſide with white. The bill and nails are of a yellowiſh brown. The colour of the eyes is not known, as the ſpecies is deſcribed by Vaillant from a ſtuffed bird in the cabinet of Mr. Raye, at Amſterdam. It was brought from Senegal. —Chevechette perlée, *Vaillant*, N° 284.

The MASKED OWL.—The face of this appears as if covered with a black maſk, which is very remarkable, as the reſt of the front and under parts of the body are of a fine white cottony down; the hind head, neck, and ſcapulars, are white alſo without any ſpot whatever. The wings and tail are browniſh, with a few black ſpots and ſome white ones. The legs and feet are entirely covered with feathers; the bill and claws are blackiſh. The tail is very ſhort; the wings nearly of the ſame length. This bird is deſcribed by Vaillant from a ſpecimen in the cabinet of C. Gigot Dorci; it was ſaid to come from Cayenne; but he is inclined to think it the young of a ſpecies not yet known in its adult ſtate.—Chouette à maſque noir, *Vaillant*, N° 44.

LANIUS, THE SHRIKE, OR BUTCHER-BIRD.

Vaillant diſtributes the Shrikes into three diviſions, which, though not hitherto done by any ornithologiſt, he ſays is abſolutely neceſſary, as they differ ſo much that they might even be made three ſeparate genera. Though we do not adopt his ſyſtem, we ſhall ſtate it.

1. The firſt diviſion includes but five ſpecies, two of which are common to moſt part of Europe; and are found through all France. But the other two diviſions contain no ſpecies known in Europe, the other three

three quarters of the globe contain a great number, many of which have been confounded with other genera; ſhrikes of the ſecond diviſion have been deſcribed as blackbirds, and blackbirds placed among the ſhrikes; and ſometimes the ſame ſpecies has been given as a blackbird, and afterwards in the ſame work as a ſhrike.

2. The ſhrikes of the ſecond diviſion vary more by their habits and flight than by their ſhape from thoſe of the firſt; yet, even in their outer conformation there are many differences eaſily to be perceived. The beak is longer, and not ſo much arched; the tarſus is longer; the wings ſhorter, and not ſo full; for, the primary wing-quills not making ſo long an angle, the wing itſelf is more rounded at the end, and they do not fly ſo well; they are in conſequence not ſo often obſerved on the tops of high trees, which is one peculiar mark of difference between this diviſion and the preceding. Indeed ſome of the ſpecies are entirely confined to thickets and low tufts of wood, where they carefully conceal themſelves, and feed moſtly upon caterpillars, worms, and all ſorts of inſects. The weakneſs of their wings hinders them from any flying-chaſe; and, if they catch birds, it is only very young ones, or ſuch as are wounded. The firſt diviſion, have the attitudes and port of the larger birds of prey, preſerving an erect poſture, on a bare branch, for hours together, and returning openly day after day to the ſame place: while the ſhrikes of the ſecond diviſion ſhow themſelves but rarely: ever concealed in the thickeſt tufts, they are known only by their warble, which betrays them continually. Being generally in motion, and not fixed to one ſpot in watching their prey, their poſition is generally more inclined; while thoſe birds who remain a long time perched in the ſame place naturally take a more upright poſition, to bring their body into a proper level, and not tire their feet; for the body of a bird is much heavier towards the breaſt part than the belly. Thoſe

of

of the firſt ſection watch their prey from the ſummits of trees, and dart ſuddenly upon all they can catch; but theſe are continually ſearching about with the greateſt diligence among the buſhes and coverts for a great extent, without fixing in any particular ſpot, except indeed when they are laying or ſitting.

3. The ſpecies which compoſe the third diviſion of African ſhrikes reſemble thoſe of the ſecond in the ſhape of their bill, which is longer and not ſo arched as thoſe in the firſt diviſion; at the ſame time that they aſſimilate in ſome meaſure to thoſe of the firſt, by having larger and more pointed wings than thoſe of the ſecond, ſo that they can riſe to the tops of the largeſt trees, among the branches of which they ſeek for inſects, which are their only food, as they never attack birds. They are found only in foreſts, where in ſmall flocks, conſiſting each of a ſingle family, they run over all the trees to a conſiderable extent of territory, not lying in ambuſh for their prey, nor keeping to one favourite ſpot, as remarked of the firſt diviſion. Their ſong is leſs frequent.

The GREATER BUTCHER-BIRD.—This ſpecies is larger than any ſpecies of ſhrike deſcribed by Briſſon, Buffon, or Linnæus. The body, feet, and tail, greatly reſemble the magpies, eſpecially that called *piapiac*; while the double notch in the upper mandible places it decidedly among the ſhrikes.

This ſpecies is about the ſize of our blackbird, but longer, for the tail is as long as the whole body from the bill to the anus. The tail is tapering, and ſpear-ſhaped. Its colours have nothing remarkable; an aſh-grey prevails over the whole plumage, except a reddiſh line on each ſide of the head forming a kind of eye-brow. Some red there is alſo on the outer barbs of the large quills of the wings, and on the tips of ſome of thoſe of the tail. The beak is lemon-colour; the feet browniſh, and the nails black. Its native place is not known, as Vaillant purchaſed the

the ſpecimen of a dealer.—Grande pie-grieche, *Vaillant*, N° 78.

BLANCHOT'S SHRIKE.—This is a new ſpecies, about the ſize of a thruſh, conſequently larger than any of the European ſhrikes. The top of the head and back of the neck are ſlate-colour, lighter in front, but inclining to olive on the back, which, as well as the mantle, rump, and tail, are of an olive-green ſhaded with yellow; the ſmaller wing-coverts are of the ſame colour, but moſtly tipped with brimſtone-yellow, as are the tail-feathers alſo. The wing-feathers are blackiſh, but edged with yellow. The whole of the under part, from the throat to the under tail-coverts, are of an ochre yellow; bill and feet lead-colour. This ſpecies was tranſmitted to Mr. Ray of Amſterdam, from Senegal, by M. Blanchot, governor of that colony, from whom Vaillant named it.—Pie-grieche blanchot, *Vaillant's African Birds*, N° 285, vol. vi. p. 122.

The FORK-TAILED CRESTED SHRIKE.—Tail forked; frontal creſt erect; body greeniſh-black. Creſt ſometimes wanting; tail long. Inhabits the Cape, Madagaſcar, and China; ten inches long.—Drongo, Gobe-mouche huppé de Madagaſcar, *Buff.* Muſcicapa Madagaſcarienſis, &c. *Briſſ.* Fork-tailed creſted ſhrike, *Latham.* Lanius forficatus, *Gmel.*

The MALABAR SHRIKE.—Body bluiſh-black; quill and tail-feathers black; outer tail-feathers long, without webs, except on the outer ſide near the end. Inhabits Malabar; ſeventeen inches long; head ſometimes creſted.—Lanius Malabaricus, *Gmel.* Malabar ſhrike, *Turton's Linnæus.*

The CHESNUT SHRIKE.—Tail wedged; middle tail-feathers at the tip, outer ones entirely, ruſty; body above cheſnut, beneath white. Ten inches long. Bill, wings, and legs, black; front black brown; crown, hind-head, nape, and neck, cinereous.—Lanius caſtaneus, *Turton.* Cheſnut-backed ſhrike, *Latham.*

The Crested Red Shrike.—Tail wedged; head creſted; body reddiſh, beneath waved with tawny and brown. Bill horny; behind the eyes a black creſcent; tail above rufous, beneath grey; legs and claws black; creſt ſometimes wanting. Inhabits Bengal; ſix inches and a half long.—Lanius criſtatus, *Gmel.* L. Bengalenſis rufus, *Briſſ.* Creſted red ſhrike, *Latham.*

The Louisiana Shrike.—Tail wedged, cinereous; body cinereous, beneath whitiſh. Under the eyes a black band; ſix middle tail-feathers black, the reſt white at the root and tip; ſecondary quill-feathers white at the tip. Inhabits Louiſiana; about eight inches long.—Lanius Ludovicianus, *Gmel.* L. Canadenſis, *Briſſ.* p. 162. Pie-grieche de la Louiſiane, *Buff.* Louiſiana ſhrike, *Lath.*

The Collared Shrike.—This is the ſpecies, ſays Vaillant, which Buffon calls the Cape butcher-bird, *lanius collaris*, which he confounds with the great cinereous ſhrike, *lanius excubitor*, and of which he has given a very incorrect repreſentation. It is called *fiſcal* at the Cape, and this name Vaillant has preſerved. It is met with, not at the Cape only, but at Senegal, and in all the interior parts of Africa. It is certainly a ſeparate ſpecies from the great cinereous ſhrike, of which Buffon makes it only a variety.

The tail-quills of the collared ſhrike are only half the ſize of thoſe of the cinereous butcher-bird of Europe; they are much more unequal in length, the longeſt being twice as long as the ſhorteſt of the ſide, conſtituting what is called a tapering tail, whereas the European bird has a rounded tail, that is, the length of the feathers diminiſhes ſo gradually, that the tail when ſpread out forms a ſemi-circle or fan; the preſent has only ſeven of the wing-quills marked with white, the other has fifteen, and the white ſtretches farther upon each feather.

This ſpecies of butcher-bird is named *fiſcal* by the coloniſts at the Cape, from a ſuppoſed ſimilarity in its habits

habits to thoſe of a petty officer of juſtice in the colony who bears that name. This ſhrike, when it ſees a graſshopper or ſmall bird, darts upon it, and carries it off to impale it upon a thorn; and is ſo adroit, that the point of the thorn generally comes out through the middle of the bird's or inſect's head, and, thus conveniently fixed, he can feed upon it at leiſure. If no thorny buſh is to be found, he jams the head of his prey between the forks of a ſmall branch; and this he does as exactly as it could be done by the human hand. This is the conſtant practice with all the prey he catches. Every hour of the day is marked with blood; for this bird is continually on the hunt, and apparently more from cruelty than want, for he cannot poſſibly devour all he catches in this manner. He is generally perched on the tops of trees, and on a withered branch in preference, whence he darts upon every thing that comes in his way. When preſſed by hunger, he will viſit a gibbet, and feed upon fleſh. The Hottentots ſay, that this bird prefers food in a putrid ſtate, and therefore fixes his prey that he may find it after a certain time: thus much is certain, he ſeldom devours his prey immediately. In the ſeventh volume of Tranſactions of the Philadelphia Society, the ſhrike's fixing graſshoppers upon thorns is accounted for upon the principle of enticing ſmaller birds to feed upon them, that the ſhrike may then ſurpriſe the birds. The Germans in America call the ſhrike *neun-toedter*, nine-killer. The following is an extract from this curious paper.

"I went to a farm, about eleven miles and a half from this place, to view a young orchard, which had been planted about five weeks ago, under my direction, where, on viewing the trees, I found, to my great aſtoniſhment, almoſt on every one of them, one, and, on ſome, two and three graſshoppers, ſtuck down on the ſharp thorny branches, which were not pruned when the trees were planted. I immediately called the te-

nant, and aſked the reaſon and his opinion of this. He was much ſurpriſed at my ignorance about the matter, and informed me, that theſe graſshoppers were ſtuck up by a ſmall bird of prey, which the Germans called *neun-toedter*, (in Engliſh, nine-killer;) that this bird had a practice of catching and ſticking up nine graſshoppers a day; and that, as he well knew they did not devour the graſshoppers, nor any other inſects, he thought they muſt do it for pleaſure. I aſked him for a deſcription of this bird, and was perfectly ſatisfied that it lived entirely on ſmall animals, ſuch as ſmall birds, mice, &c. for I had paid attention to this bird as early as the year 1761, when, in the winter, one of the ſame ſpecies took a favourite little bird of mine out of my cage at the window; from which time I have watched them more cloſely, and have found them more numerous in the weſtern country than here. Not being ſatisfied with what the tenant had told me reſpecting the intention of the bird's doing all this, (viz. for diverſion's ſake,) and particularly obſerving each and every one of theſe graſshoppers ſtuck up ſo regularly, and in their natural poſition as when on the ground, not one of them having its back downwards, I began to conjecture what might be the real intention which the bird had in this; and my determined opinion was, that this little bird-hawk, by inſtinct, made uſe of this art, in order to decoy the ſmaller birds, which feed on inſects, and by theſe means have a fair opportunity of catching them. All this I communicated to my friends on my return home, and they were not leſs aſtoniſhed at what I had related to them, than I had been on diſcovering the fact. It being agreed that one or more gentlemen of learning and obſervation ſhould more minutely examine into this matter, the proprietor of this farm, with another gentleman and myſelf, went this day out for the purpoſe; and, viewing the graſshoppers on a number of theſe ſmall trees, (ſome of which we cut off

and

and took home,) we returned to the tenant, who not only himſelf, but alſo his father and ſiſter, gave us the beſt aſſurances, that they had, long ſince, and from time to time, obſerved this bird catching graſshoppers and ſticking them up in the manner already related, and that ſometimes they had obſerved, in places where this ſpecies of bird keeps, numbers of graſshoppers ſtuck up on a thorn buſh in like manner. The reverend Mr. Velck is perfectly ſatisfied that this bird-hawk is the Lanius Canadenſis, (vol. iv. p. 190.) and has obligingly communicated the following account of this little bird-hawk to me; it is extracted from a German publication, printed at Gœttingen, in 1778, under the title of "Natural Hiſtory for Children, by M. George Chriſtian Paff;" who, after giving a deſcription of the different ſpecies of this bird, concludes thus: "Why is this bird of prey called the nine-killer? Becauſe it is ſaid to have the habit of ſticking beetles or other inſects, and perhaps ſometimes nine of them in ſucceſſion, upon thorns, that they may not eſcape until he has leiſure to devour them all at once. And for the ſame reaſon, it is ſometimes called the thorn-ſticker." Now by the above account we ſee, that it is known in Europe that this ſame ſpecies of bird actually does ſtick up inſects of different kinds on thorns, &c. but it is ſuppoſed they eat them immediately after being ſtuck up. Here the caſe is quite otherwiſe. They remain ſtuck up, for we muſt ſuppoſe theſe to have been ſtuck up at leaſt ſome weeks ago, and before the hard froſts ſet in. The very birds (as we ſuppoſe) that had ſtuck them up are now on the ſame ground, watching the ſmaller birds that came out to feed, and have been ſeen catching the latter but a few days ago. If it were true, that this little hawk had ſtuck them up for himſelf, how long would he be feeding on one or two hundred graſshoppers? But if it be intended to ſeduce the ſmaller birds to feed on theſe inſects, in order to have an opportunity of catching them, that

number,

number, or even one half, or leſs, may be a good bait all winter; and all of us, who have conſidered theſe circumſtances, are firmly of opinion, that theſe inſects, thus ſtuck up, are to ſerve as a bait, &c. through the courſe of the winter."

Happily, this bird, with ſuch ſanguinary and mercileſs habits, has not received from nature a great degree of ſtrength: had it been of the ſize and ſtrength of the eagle, it would have been the ſcourge of the whole animal creation. It is curious to watch this butcher-bird while he is at work; if you examine the places he frequents, you will conſtantly find the victims of his cruelty on the thorns and branches; but ſometimes ſo much rotted and dried up, as to furniſh an additional argument that it is rather from wantonneſs than want that he murders ſo many. This bird is not ſhy, ſo that he may be eaſily watched; his uſual mode is, as ſoon as he has caught any thing, to bear it quickly to a thorn or forked branch, and there to fix it; then away he goes in ſearch of more, leaving the hapleſs animal dead, or writhing in miſery. This bird is bold, vindictive, and very noiſy; he ſuffers no bird of prey within his domain; yet many avail themſelves of the prey he has fixed or impaled, as he cannot watch all at once.

Violent battles often take place between the males of the ſame ſpecies, which ſometimes terminate in the death of one of the combatants, eſpecially if a female be the object in diſpute. The notes of this bird are very various; ſometimes it chatters for ſeveral hours together without ceaſing, with ſundry ſtrange geſtures, and flying from tree to tree, eſpecially in the ſeaſon of love. Its flight is low, always ſinking and riſing, never in a ſtraight line. The male and female are generally ſeen together; the male is rather the ſtrongeſt, and his colours are brighteſt. The neſt is placed in a forked branch of a tree; it is made with roots and moſs, lined with wool and feathers. The female lays

five

five eggs, which ſhe and the male ſit on by turns; they are very careful of their young, and do not quit them till they become ſtrong.

The fiſcal, while young, has no white but on the edges of the ſcapulars and on the belly: the reſt of the plumage is a browniſh grey with tints or ſtreaks of a darker colour, but without an atom of black, ſo that it appears abſolutely another ſpecies. When full-grown, it is of the ſize of our cinereous ſhrike, though ſomewhat longer. See vol. iv. p. 180. The bill, feet, and nails, are blackiſh; all the head, the back of the neck, and the mantle, are of a dirty black; the ſcapularies are white, the croupe greyiſh. The wing-quills are black for the moſt part; there is white in ſome of the middle ones, and the latter ones are edged with white. The four middle quills of the tail are black; the others on each ſide have more and more white upon them, ſo that the laſt on each ſide is quite white on its outer part. The throat, front of the neck, breaſt, and all the under parts of the body, are of a delicate white, but incline to grey in the female. The eyes are dark brown.

This ſpecies is very common at the Cape; it is found in all the gardens of the town, on the trees in the ſtreets, and upon the houſes. Vaillant obſerved it alſo in the interior, as far as the Namaquois, where it has not varied in the leaſt, either in its mode of life or in its colours. It keeps conſtantly in the ſame canton, perched in the ſame tree, and ſeems to have a predilection for a particular bough, where it ſits ſinging its ſharp diſcordant notes. In flying it keeps nearly to the ſame ſpot, while watching the inſects it has been obſerved hiding under the graſs; this is the caſe with moſt birds of prey who hunt flying.—Lanius collaris, *Gmel.* L. Capitus Bonæ Spei, *Briſſ.* Piegrieche du Cap, *Buff.* Collared ſhrike, *Latham.* Fiſcal, *Vaillant*, N° 61, 62.

The

The Indian Shrike.—This ſpecies is called by Vaillant *le pendeur*. It was in the cabinet of the late Abbé Aubry. Its country and habits are unknown, except from the following ticket affixed to it when ſold: "The Indian ſhrike. It lives on inſects and ſmall birds, which it plucks or ſkins before eating them: when it has eaten enough, it ſticks the remainder on a thorn till wanted." From this ſhort notice, it is plain that this bird belongs to the ſame diviſion as the fiſcal, which is found at the Cape. It is about the ſize of the rutilous ſhrike. Two white ſtripes originate at the corner of the mouth, one of them going over the eye, the other under it; and they unite below on the neck, incloſing a piece of black in ſhape like an ace of clubs cut longitudinally down the middle. The throat and front of the neck are black, which extends along the breaſt, and tapers off towards the middle of the ſternum. The upper part of the head, back of the neck, ſcapularies, and the back in general, are of a bluiſh grey, which grows lighter towards the croupe and the upper tail-coverts. The wing-quills are black; the firſt of them are edged with light-grey on their outer barbs, and the ſix laſt only are white at the ends. The four middle feathers of the tail are quite black, and of equal length; the reſt, four on each ſide, go off tapering, partly white in their outer extremities, and blackiſh within or underneath, in ſuch a manner as that white occupies more ſpace in proportion as the feathers become ſhorter; ſo that, when theſe feathers are cloſed, the tail appears entirely black above, and white underneath, except where the four middle quills run beyond the reſt. The tail, when ſpread out in the act of flying, is ſhaped like the top of a ſpear rounded at the extremity. All the under part is entirely white; the beak, feet, and nails, ſhining black. Vaillant ſuppoſes this to have been the male bird.—Pendeur, *Vaillant*, N° 66, fig. 1.

The

The LUZONIAN SHRIKE.—Tail wedged; a black ſpot near each ear; tail feathers reddiſh, barred with brown at the tips. Bill and body above grey-brown, beneath and on the ſides reddiſh with white lines.—Lanius Lucionenſis, *Gmel.* and *Briſſon.* Luzonian ſhrike, *Latham.*

The MAGPIE SHRIKE.—This is a ſtrong butcher-bird, and one of thoſe which might be regarded as forming the interval between the genera of *corvus* and *lanius.* It has the ſame kind of beak with the cinereous ſhrike, but the feet are longer; and the body is ſhorter and thicker than the ſhrikes in general. It would indeed be a pretty little magpie, but for the bill, which is longer, narrower, and very evidently hooked on each ſide, a mark belonging to many birds, but particularly to the ſhrikes. Hardly any genus, Vaillant obſerves, has had its ſpecies ſo much confounded as the ſhrike, yet their marks and characters are very evident; but naturaliſts have been more anxious to reduce and confine the works of nature within their own narrow and erroneous ſyſtems, than to frame their ſyſtems upon the unerring rules of nature.

This ſpecies, which Vaillant calls *pie-grieche rouſſe à plaſtron blanc.* the red ſhrike with a white pad, is about the ſize of a blackbird. The head, hind part of the neck, mantle, ſcapularies, back, and wings, are of a dull black without any gloſs; the throat, front of the neck, and ſternum, are covered with feathers of the brighteſt red, relieved by a ſemi-annular broad ſtripe of white which covers the breaſt from wing to wing: this is what Vaillant calls *plaſtron,* as it is placed in the ſituation of that ſtuffed plaſtron or pad which fencers uſe in practiſing to receive the thruſts: a red ſtroke, which is continued along the two middle quills of each wing, runs lengthwiſe upon this white ſpot. However, this ſtroke itſelf was white in two out of four which Vaillant exa-

mined, and he ſuppoſes they might have been the females. The lower belly, and under wing-coverts, are of a light fawn-colour. A white ſtripe borders the cheek and lower mandible on each ſide. The tail is very much tapered, (etagée;) it conſiſts of ten feathers, of a bright red on the ſurface, and fainter underneath; but the quills or ſtems are white through the whole of their length. The bill, feet, and nails, are black. This beautiful ſpecies is ſaid to come from the South-Sea Iſlands.—Pie-grieche rouge à plaſtron blanc, *Vaillant*, N° 65.

The SMALLER BUTCHER-BIRD.—This ſpecies is already deſcribed, vol. iv. 184. It is found generally throughout Europe; and in Africa very commonly in all the ſouthern part, if we except for about thirty leagues diſtance from Cape Town. The female has not the head and neck marked with light grey like the male, but of the ſame reddiſh brown as the mantle; nor has her breaſt and ſides ſo ſtrong a tint of that beautiful roſe-colour which ornaments the male. But, when very young, they are exactly alike. They build on trees in the fork of a branch near the body of the tree: they lay from four to ſix eggs, often only three. They appear not to be migratory, any more than the woodchat; for Vaillant obſerved them, both in France and in Africa, at all ſeaſons. It is true, that in ſpring and ſummer, they come into the plains, and perch upon ſingle trees; and at the approach of winter get to the borders of woods, eſpecially if any ſpring or rivulet be at hand; but in Africa, as the climate is much hotter, they continue the ſame haunts all the year round. Their principal food, as in Europe, is inſects, eſpecially caterpillars; only ſeizing occaſionally upon young birds that can make no reſiſtance.—Ecorcheur, *Vaillant*, N° 64. Red-backed ſhrike, *Penn.* and *Lath.*

The *Variegated Shrike.*—This variety has the body grey, beneath reddiſh with brown ſtreaks; ſcapularies half

half white and half black, three outer quill-feathers white at the baſe and tips, the outermoſt reddiſh white above. — L. colurio varius, β, *Gmel.* from *Briſſon.* Variegated ſhrike, *Latham.*

The *Woodchat*, or *Rutilous Shrike.*—Body above variegated with reddiſh-white and black, beneath reddiſh-white. This variety has been deſcribed, vol. iv. p. 183. We ſhall add Vaillant's remarks upon it, as it is found very generally in Africa; and he brought ſpecimens from the interior parts of the Cape of Good Hope, and Adanſon from Senegal. Its manners and habits are the ſame in Africa as in Europe, nor does it vary either in ſize or colour. Buffon ſays they are migratory, which Vaillant doubts, as he has found them in Lorraine in the winter; and has killed ſome in Africa at the very time when, according to Buffon, they muſt have returned to France. If they do remove to a warmer climate, it is not probable that they make ſo long a journey as to the ſouth of Africa. But in general theſe birds are fond of remaining in the ſame place, and never remove, unleſs diſturbed and perſecuted; for, like all birds of prey, they are impatient of diſturbance, and delight to preſerve excluſive poſſeſſion of a certain diſtrict, where they may hunt, lay their eggs, &c. The male is ſomewhat larger than the female; and is eaſily diſtinguiſhed, becauſe the female has not that dark red on the head and back of the neck. This bird, when young, is ſo different from what it afterwards becomes, that hence Vaillant ſays it has come to be deſcribed as a variety of the *collurio*, though he affirms it to be a diſtinct ſpecies. Vaillant gives a figure of a young one, N° 64, fig. 2. which he ſays may be depended upon to be of this ſpecies; as he has followed and examined more than twenty coveys of them in Europe and Africa, and brought up ſeveral of their young.—Lanius collurio rufus, γ, *Gmel.* from

Briſſ. Woodchat, *Penn.* and *Lath.* Pie-grieche rouſſe, *Buff.* and *Vaillant*, N° 63, fig. 1, 2, and 64, fig. 1.

The *Senegal rutilous Shrike.*—Of this variety very little is known. It differs from the preceding merely in having the baſe of the quill-feathers ſpotted with white.—L. collurio Senegalenſis, ♂, *Gmel.* Pie-grieche rouſſe du Senegal, *Buff.*

The *Senegal black-headed Shrike.*—Head black; tail long. Vaillant calls this *tchagra;* and, aſſuming the woodchat as a diſtinct ſpecies, he conſiders this as a variety of it. The wings (he obſerves) are ſo ſhort, its feathers ſo thin and weak, that it is almoſt excluded from that portion of the atmoſphere which birds in general inhabit. Confined almoſt to the roots of thoſe trees on the branches of which other birds are conſtantly perched, it can only ſkim the earth with a ſhort, ſlow, and painful, flight, like a bird whoſe wings have been clipped: the wings, indeed, inſtead of being pointed at the end, are nearly ſquare, and when folded up hardly reach the origin of the tail. Hence appears a kind of vicious conformation, as if the bird did not belong to this genus; which is increaſed by the bill being longer and thinner towards the point; the bill is alſo weaker than in the woodchat; ſo that this muſt be regarded as the laſt link in the chain that leads to another diviſion.

It is very evident that this ſhrike can by no means ſeek its prey flying; on ſhrubs and low plants it is therefore continually in queſt of caterpillars, ſpiders, and inſects which cannot fly; the gnats and graſshoppers are generally nimble enough to eſcape. This, among many other inſtances, ſhows how the habits depend upon the formation, and how nature modifies theſe for diverſifying the manners, even to the producing of birds of prey in the loweſt regions of the air and on the ſurface of the earth. The oſtrich, the caſſowary, &c. which are deſtined to run upon the

the ground, have wings whoſe pinions are not able to ſupport them in the air, while their feet are ſtrong and maſſy, fit to ſuſtain them in the long journeys they are obliged to make. Thus Nature, ever wiſe and provident, in forming different beings for the perfection of her work, gave to each the properties neceſſary for the ſpace they were to fill, while ſhe had the prudence to deny them whatever might be dangerous or contrary to the functions for which they were deſtined. "A noble and ſublime leſſon," exclaims Vaillant, "for thoſe who undertake the government of their fellow-men! it is not ſufficient to make laws againſt evil-doers; we ſhould deprive them of the means of doing evil."

The tchagra is nearly as large as the cinereous ſhrike. The tail tapers but very little, and is juſt rounded at the tip. The top of the head is browniſh black, ſlightly tinged with olive. The hind-head, neck, back, and ſcapularies, are of a brown tan-colour. The throat is whitiſh. A white ſtripe begins at the corner of the eye, and runs along above a black line which is parallel to it down the ſide of the neck. The front of the neck, and all the under part of the body are cinereous. The large wing-coverts and the outer barbs of the quills are ferruginous red; the remainder browniſh with a greeniſh tint above; all cinereous underneath. The two middle feathers of the tail are grey imperceptibly ſtreaked with a darker colour; the others are blackiſh, but all white at the tips. The bill and feet are black; the iris of the eye brown. This bird ſeeks the thickeſt coverts, and would be found with difficulty were he not betrayed by his ſong, which is a conſtant and loud repetition of *tcha-tcha-tcha-gra*, whence the name is taken. The female is ſomewhat ſmaller than the male, and her colours in general not ſo dark, eſpecially at the top of the head. She lays five eggs. The tchagra, when young is of a very light

light grey on the ſurface of the body, and reddiſh in thoſe parts where the full-grown bird is white. The black upon the head of the male does not appear till a certain age. They are found about the river Gamtos, and thence to Caffraria, but not among the Namaquois; alſo at Senegal.—Lanius collurio melanocephalus, , *Gmel.* Pie-grieche à tête noir du Sénégal, *Buff.* Tchagra, *Vaillant*, N° 70.

The RED SHRIKE.—This bird is found in the iſland of Java, whence it was ſent to M. Temminck, who preſented it to Vaillant. It is about the ſize of the rutilous ſhrike, with which however it muſt not be confounded, though it has much red in its plumage. Buffon has a very erroneous remark, which is, that all the ſhrikes which have red in their plumage are varieties of the rutilous ſhrike. A ferruginous red is the prevailing colour in the plumage of this ſpecies, which Vaillant calls *rouſſeau*, to diſtinguiſh it from the *lanius collurio rufus*, deſcribed before, though the preſent has a better title to the denomination of *red* than the former, which has ſome dark red about the head and back of the neck; whereas, in this, the whole upper part of the head, back of the neck, ſcapularies, back, croup, and ſurface of the tail, are of a bright red. The forehead is encircled with a bandeau of white, which, going over the eye, falls down upon the neck, bordering a long black ſpot, which runs from the corner of the mouth, ſurrounds the eye, and ſpreads a little way on the neck. The wings, where they join to the body, are whitiſh; the ſmaller coverts are red; the greater ones have a border of pale red, as have the middle quills, which have a black ground; the large wing-quills are black alſo, with a reddiſh border. The throat, the front of the neck, and all the under parts of the body, are white more or leſs ſhaded with pale red, which becomes ſtronger on the ſides of the breaſt anſwering to the ſetting-on of the wings, and on the

ſides,

ſides, legs, and middle of the belly. The tail is leſs taper than in the preceding ſpecies, though more than in the rutilous ſhrike: as only the two middle tail-quills and the exterior barbs of the laterals are red, the interior barbs being light grey ſhaded with red, this therefore is the colour of the under part of the tail. The bill, feet, and claws, are lead-colour. Nothing certain is known of the habits, food, neſting, &c. of this bird.—Rouſſeau, *Vaillant*, N° 66, fig. 2.

The IRON-BILL.—The beak of this bird is extremely large and thick; hence the name of *bec de fer* given it by Vaillant: the upper mandible is convex, broad at its origin; and ending in a blunt point; the lower mandible is even. The head is round, of a ſize proportioned to the bill; it has a curious long tuſt of irregular feathers almoſt upright, but rather bending forward. The neck is thick, the body ſtout and bulky. The feet are ſtrong, armed with crooked claws; the wings, when folded in, reach below the middle of the tail; the tail conſiſts of ten quills a little tapering, ſo as to have ſomewhat of a rounded form. The tongue is ſmall, of a triangular ſhape, and faſtened to the bottom of the throat. This ſpecies is about the ſize of our blackbird, but ſtouter. The greater part of the plumage is black. The throat is of a bright red, with ſome yellow ſtreaks below; theſe feathers are ſtiff and hard. The middle of the body is croſſed by a broad band of yellow, ſtreaked with red in the middle, and dotted with black on the ſides. The rump and tail-coverts are of a greeniſh yellow. The mid-quills of the wings are partly white on their outer barbs; ſo that, when the wing is ſpread, the white appears in regular lines. The reſt of the plumage, including the tuft, is black. The longeſt feathers of the tuſt riſe near four inches, and are excavated or grooved. The bill is ferruginous grey; the nails are black; feet and legs bluiſh.

The habits of this bird are not known; its ſhort tongue

tongue would make us ſuppoſe it lives on inſects. It was brought from the South-Sea iſlands. Vaillant is of opinion that it forms a diſtinct genus, of which this ſpecies only is at preſent known, though probably there are many more in the ſame country. If it ſhould hereafter be aſſumed as a genus, it would naturally be placed between the ſhrikes and the barbets. —Bec de fer, *Vaillant*, N° 79.

Geoffroy's Shrike.—This beautiful ſpecies was brought by Geoffroy Villeneuve from Senegal, among other curioſities which that ingenious young naturaliſt collected in Africa. It is called "tufted Senegal ſhrike" in the muſeum of natural hiſtory at Paris. Yet Vaillant aſſerts that it is not a ſhrike, and that it differs very much from that genus of birds in its modes of living. He doubts not but they are gregarious, (which the ſhrikes never are;) and that they ſeek their food in moiſt grounds, which they eaſily penetrate with their bill; as in all theſe birds which he examined he found earth adhering to the bill. Till a new claſſification ſhall be made, we have thought it beſt to place it here. The notch at the end of the upper mandible might occaſion it to be placed among the ſhrikes; but the general ſhape of the bill will not juſtify this, nor will the following deſcription.—A broad ſlaſhed eyelid runs all round the eye. Part of the feathers between the eye and the bill briſtle up, while others ſtretch forward, covering the noſtrils entirely, and great part of the bill. The head is ornamented with a ſoft tuft falling down behind, which no doubt the bird can erect at pleaſure. The tail is ſquare; the wings about half its length. The tuft, bill-feathers, and cheeks, are pure white. The head, and the feathers about the ears, are ferruginous grey inclining to black. Below this, the hind and fore part of the neck, the throat, breaſt, ſides, belly, the inner wing-coverts, and the under tail-coverts, are as white as ſnow. The mantle, ſcapulars, and wings,

are

are black, and in certain positions appear of a bluish gloss. The two outer quills of the tail on each side are entirely white; the third is black at its origin; and the rest have successively more black and less white as they approach the middle. The bill is black; eyelids, legs, feet, and nails, yellow. This bird is the size of our thrush. The female is about a sixth part smaller; the tuft is smaller; the white rather inclining to ash-colour, and the eyelids not so broad. Vaillant has also described and figured the young bird: the tuft is very small; the mantle and scapulary feathers are tipped with brown; the white parts were mostly cinereous; and the eyelids do not appear.—Geoffroy, *Vaillant*, N° 80, 81.

The BRUBRU.—The name is taken from the note, which is a repetition of the syllable *bru*, dwelling upon the *r*; indeed his song much resembles that of our greenfinch, when he calls to the female. The colours are an agreeable intermixture of black, red, and white, distributed as follows. The male, which is larger than the female, has the top of the head and back of the neck black; the rest of the upper surface, as mantle, scapularies, rump, and upper wing-coverts, is black and white. A white line encircles the forehead near the bill, goes above the eye, then grows broader as it runs amidst the black on the sides of the neck. There is a large white spot upon each wing, belonging in part to the coverts and mid-feathers of the wings, which are mostly, as well as the large wing-quills, bordered with white. The four middle feathers of the tail are black; the rest on each side have progressively a little more white, so that the outer one on each side is entirely edged with that colour; they are all tipped with white. The tail is rounded at the end by the effect of the lateral feathers. The wings, when folded up, extend above half the length of the tail. The throat, front of the breast, and under tail-coverts, are white; a ferrugi-

nous red ſtripe runs along the ſides, forming a border to the wings when cloſed. The eye is brown; the beak black.—On the female, the white of the upper ſurface is tinged with red; the red on the ſides is a weaker ſhade; the black in general is browner. In the young, the white part is all ſhaded with rufous, even on the under parts of the body.

Theſe birds are ſometimes ſeen in ſmall flocks, except in the pairing ſeaſon, when the male and female only keep together. The neſt is generally in the mimoſa-tree in the fork of a branch; made up of moſs and pieces of roots, lined with wool and feathers. The female lays five white eggs ſpotted with brown. Theſe birds are firſt ſeen about the 28th degree of ſouth latitude, near the Rio Grande, where they are very plentiful, and not ſhy; and hence they are found almoſt to the tropic; but not on the eaſtern coaſt, nor in Caffraria.—Bru-bru, *Vaillant*, N° 71.

The Cubla.—This ſpecies ſeems to occupy the ſpace left vacant by the preceding; for it is met with along the whole eaſtern coaſt of Africa, from the river Duyven-ocks to Caffraria. Its ſize is the ſame as the foregoing. They go in ſmall flocks of ſix or ſeven, all of a family, which never ſeparate nor quarrel, but enjoy every thing in common. If one of the party diſcovers a neſt of caterpillars, of which they are very fond, he calls the reſt. In an inſtant they examine every branch of a tree; and they can raiſe up the bark with their bills to come at the larvæ, chryſaliſes, and the inſects which burrow there. In the ſeaſon of love, they ſeparate in couples, to form new generations and family-flocks. They ſeek a quiet place among buſhes and thorns to make their neſt, which is formed of moſs interwoven with flexible roots. Five or ſix eggs are the extent of the laying.

The male is ſomewhat larger than the female. His head, back of the neck, and mantle, are of a fine black;

black; the lower part of the back is covered with long ſilky feathers, very thin, and of a bright white. The under parts of the body from the throat to the under tail-coverts, is white, with a ſlight tint of grey on the ſides. The ſcapulars are mingled with black, white, and grey. The wing-coverts are black, partly edged with white; the quills of the wings are black alſo, exteriorly edged with white. The tail is black rounded at the end, and each feather is white at the tip, and the outer feather on each ſide has a white line along its outer edge. The eye is a bright yellow; the bill and nails blackiſh. In the female the white is more tinged with grey, and the black is lighter. In the young one, a reddiſh grey appears inſtead of the white colour deſcribed above, and reddiſh-brown inſtead of black.

The cry or ſong of the male is *cha-cha*, which he utters very diſtinctly, lengthening out the *a*. Vaillant relates, that theſe birds are more curious than ſhy; for, on the approach of man or beaſt, the bird erects his feathers, and comes towards it, uttering inceſſantly its cha-cha. Many of the African birds are deſcribed by Vaillant as not being ſhy or difficult of approach; we apprehend that in thoſe extenſive regions, ſo thinly inhabited, the feathered race have not yet been ſo much diſturbed or perſecuted by man as to have learnt caution. This ſpecies is moſt common in the foreſts of Auteniquois.—Cubla, *Vaillant*, N° 72.

The SILENT SHRIKE.—This ſpecies is thus denominated by Vaillant, becauſe he ſays he never heard it utter any note or cry whatever, though he has ſhot them in every ſeaſon of the year. This bird is very common in the foreſts of the Auteniquois in Africa, and all along the coaſt of Natal; alſo in many of the interior parts, particularly thoſe abounding in wood.

The male is ſomewhat larger than our rutilous ſhrike. The top of the head, back of the neck, man-

tle, ſcapularies, tail, and wings, are black, except a little white on ſome of the primary wing-quills, and the outer barbs of the two middle ones, which together form a white bar along the wing, as in the *boubou*, only that it does not reach all along the wing; for in this ſpecies all the wing-coverts, ſmall and great, are abſolutely black. The tail is tapered, and the lateral quills are white outſide. All the under parts of the body, from the throat, are white; the eyes are brown; the nails black, the feet browniſh, the beak the colour of horn. The female is ſomewhat ſmaller than the male; her upper ſurface, inſtead of black, is of a browniſh hue; and the white underneath, except the throat and the bar along the wing, inclined to grey. The male and female are generally ſeen together. They live entirely on inſects; for Vaillant killed at different times no leſs than fifty-eight, and found nothing but the remains of inſects in their ſtomachs. They begin to lay in November; they make their neſt in trees in the moſt curious manner; the outer part is conſtructed entirely of twigs, and it is lined with hair or the down furniſhed by ſeveral African plants, eſpecially the *meſembrianthemum*, which the coloniſts and Hottentots of the Cape call *kana boſſies*. The eggs are three or four in number, of a pale green, ſlightly ſhaded with red. All the young, whether males or females, perfectly reſemble the mother.—Pie-grieche ſilencieuſe, *Vaillant*, N° 74.

The Olive-coloured Shrike.—Vaillant has given three figures of this African bird, becauſe it varies ſo much at different periods of growth, that it might be eaſily miſtaken for different ſpecies. His firſt figure repreſents the male in his perfect ſtate and natural ſize, that is, at two years old. At that period, the upper ſurface of the body, from the head to the upper tail-coverts, as well as the wing-coverts, are of an olive-green inclining to yellow; the two mid-quills of the tail are of the ſame colour; the laterals

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are partly yellow, which increaſes on the outer one on each ſide; their interior barbs are blackiſh, and their edges olive-green; they are all tapering, ſo that the tail is rounded at the end. The wing-quills are blackiſh in their concealed parts when the wing is folded up, in the outer part of the ſame green as the mantle, but all edged with yellow. A band of ochre-yellow goes round the forehead. A long black ſpot or ſtripe, in the upper part of which is the eye, ſtretches down the neck, edged with yellow on the upper part. The throat, front of the neck, breaſt, and as far as the belly, and the feathers on the legs, are of a bright ochre-yellow. The ſides, lower belly, and under tail-coverts, are of a faint yellow, ſhaded with olive. The bill is black, the eyes reddiſh brown, feet and nails light brown. It is about the ſize of the rutilous ſhrike.

His ſecond figure is the male before he has attained his full growth, namely from his third moult, which happens about the beginning of his ſecond year. At this time, a reddiſh white runs round the forehead; the head and hind part of the neck are grey with a ſlight tint of olive; and the black ſtripe on the ſides of the neck is edged with white inſtead of yellow. The green upon the upper part of the body, tail, and wings, is leſs bright, as well as the yellow edges of ſome of the quills. The throat, front of the neck, and breaſt, exhibit a mixture of yellow and of different ſhades of red, darker however on the breaſt. The feathers about the ſternum, ſides, belly, and under the tail, are white tinged with olive. The eyes, feet, and bill, are ſimilar to the full-grown male.—Previous to the firſt moult, the bill and feet are brown; the black ſpot on the ſide of the neck is not yet viſible, the head is olive-green ſlightly tinged with grey; neither does the yellow edging to the wings appear as yet; only the laſt feathers have a faint border of white; the yellow of the tail is as yet only

only dun-colour, throat and breaſt the ſame. A ſlight ſhade of olive prevails on the upper ſurface of the body; which colour alſo appears in ſtripes upon the light-grey of the ſides, belly, and under part of the tail. In this ſtate it exactly reſembles the female; but, after the firſt moult, it is eaſy to diſtinguiſh the male by the darker colour of the head, and the black ſpot or ſtripe which begins to appear on the cheek. He next gives a figure of the female, which it is now unneceſſary to deſcribe, as the account juſt given of the very young male agrees with it in every particular, ſo that the figure of the female may ſerve to give an idea of the male previous to its firſt moult. Thus it is extremely difficult in the young birds to diſtinguiſh the males from the females; the female, however, is generally the ſmalleſt, and never changes her colours.

The male is about the ſize of the *collurio*, and the female ſomewhat ſmaller; but Vaillant remarks that moſt ſpecies of birds become larger in cultivated ſpots where there is plenty of food; and that this difference is more manifeſt in Africa, where vaſt tracts of uncultivated country intervene. They conſtruct their neſts in thickets or on trees, laying uſually five eggs. Vaillant obſerved theſe birds in the foreſts about the bay of Lagoa, and on the borders of the Gamtoos, the Sondag, and Swarte-kop; but not at the Cape.—Oliva, *Vaillant*, N° 75, fig. 1, 2. N° 76, fig. 1.

The Black Shrike.—Body black; tail ſomewhat wedged. Inhabits Jamaica; ſeven inches long; bill an inch.—Lanius niger, *Gmel.* Black ſhrike, *Latham.*

The Leverian Shrike.—Tail long, wedged, black at the tip; bill, head, neck, middle of the breaſt, and legs, black; the other parts white. Greater wing-coverts and ſecondary quill-feathers white at the edge; two middle tail-feathers long again as the reſt, all of them black with white tips. Inhabits South America;

America; ten inches long.—Lanius Leverianus, *Gmel.* Magpie ſhrike, *Latham.*

The SURINAM SHRIKE.—Tail wedged, and, with the neck, crown, ſhoulders, and wings, black; body above mouſe-colour, beneath bluiſh-aſh. Wings ſhort; wing-coverts and ſecondary quill-feathers edged with white; tail-feathers, except the two middle ones, white at the tip. Inhabits Surinam; five inches long.—Lanius atricapillus, *Gmel.* from *Merrem.* Surinam ſhrike, *Turton.*

The POMERANIAN SHRIKE.—Body above black, beneath white; hind-head and back of the neck dark ruſty ſurrounded with black; two ſpots on each ſide the wings and rump white. Bill, legs, and wings, black; eight primary quill-feathers white at the baſe; two outer tail-feathers white, next two or three on each ſide whitiſh from the baſe to the middle, and tipped with white. Inhabits Pomerania—Lanius Pomeranus, *Gmel.* from *Sparmann.*

The CHINESE SHRIKE.—Body yellowiſh; front and wings black. Head and neck on the upper part grey, neck beneath dull reddiſh-white; back and belly reddiſh; quill-feathers black, the firſt white at the baſe, the ſecondary whitiſh at the tip. Inhabits China; eight inches long.—Lanius ſchach, *Gmel.* from *Oſbeck.* Chineſe ſhrike, *Lath.*

The BRASILIAN SHRIKE.—Body black, beneath yellow; crown with a tawny ſtreak; band over the eyes white. Behind and beneath the eyes a black ſpot; chin white; feathers of the body above edged with yellow; wings beneath yellow; tail brown with a rufous edge, beneath olive. Inhabits Braſil; nine inches long.—Lanius pitangua, *Gmel.* from *Marcgr.* Bentaveo, Tyran du Braſil, *Buff.* Braſilian ſhrike, *Latham.*

The BARBARY SHRIKE.—This ſpecies is briefly deſcribed at vol. iv. p. 189. but more particularly by Vaillant. He ſays, it is Briſſon's red ſhrike of Senegal;

negal; but the ſpecimen he examined muſt have been much faded; for the top of the head is not fawn-colour, as he deſcribes it, but of a beautiful yellow ſhaded ſlightly with green; at leaſt this is the colour of the male; the ſame part in the female is olive-green. Vaillant compared ſome of theſe birds which he found on the confines of the Great Namaquois with ſeveral of the ſame ſpecies brought from Senegal by Villeneuve: he found them, in colour and ſize, exactly ſimilar. The yellow of the head falls down the back of the neck, and ends in a point on the back. The cheeks, ſides of the neck, ſcapularies, back, wings, and tail, are black without mixture or ſhade of any other colour. The throat is red ſhaded with yellow; all the reſt of the plumage, to the belly, is of the brighteſt and moſt beautiful red. The feathers of the legs, of the lower belly, and under the tail, are fawn-colour. The tail tapers a little, conſequently is round at the end. The bill is black; the feet and nails brown; the eyes nearly hazel-colour. The female is ſomewhat leſs than the male, and her colours not ſo bright. Vaillant obſerves that he had but little opportunity of making remarks on the manners of this bird, having continued but a ſhort time in the canton where they are found; the ſeaſon of love was paſt, ſo that he could not tell if they had any ſong or not. The remains of inſects were found in the ſtomachs of thoſe he killed, which perfectly agrees with the name that has been given it. —Lanius Barbarus, *Gmel.* L. Senegalenſis ruber, *Briſſ.* Gonolek, Pie-grieche du Sénégal, *Buff.* and *Vaillant*, N° 69.

The Orange Shrike.—Colour tawny-yellow; chin, throat, and breaſt, reddiſh. Head above the eyes, and nape, black; wings and tail brown; bill black; claws pale. Inhabits Cayenne; ſeven inches long.—Lanius aurantius, *Turton's Linn.*

The

The SENEGAL SHRIKE.—Colour above grey, beneath whitiſh; crown and band of the eyes black; tail feathers black tipt with white. Quill-feathers rufous on the outer ſide; tail-feathers ſix, with ſlight brown bands and uniform tips. Inhabits Senegal; near nine inches long.—Lanius Senegalenſis, *Gmel.* and *Briſſ.* Pie-grieche griſe du Senegal, *Buff.* Senegal ſhrike, *Latham.*

The BLUE SHRIKE.—This ſpecies has been accurately deſcribed by Briſſon under the name of the *blue ſhrike from Madagaſcar.* Buffon gives it the ſame name; but he ſpeaks of it very ſlightly, conſidering it only as a variety of the cinereous ſhrike; (ſee vol. iv. p. 181.) and his plate of it is very incorrect, neither giving an idea of its beautiful colours nor of its true ſhape. It is indeed one of the moſt beautiful of the African birds. One ſtriking difference, ſays Vaillant, which alone were ſufficient to mark it a ſeparate ſpecies from the cinereous ſhrike, is the ſhape of the tail, which in the blue ſhrike is ſquare, that is, the feathers are of equal length, whereas in the other ſpecies the tail, as we have ſeen, is tapering, the length of the feathers diminiſhing from the middle to the ſides. The bill is very different alſo.

The blue ſhrike is about the ſize of the *collurio*, or ſmaller butcher-bird. The head, hind part of the neck, ſcapularies, back, and upper tail-coverts, are of the pureſt and brighteſt ultramarine blue; all the wing-coverts, as well as the outer barbs of the wing-quills, the two middle ones of the tail and the outer edges of the lateral ones, are of the ſame fine blue with the ſurface of the body; but the tips of the wing and tail quills, and their inner barbs, are blackiſh. Between the noſtrils and eyes, and at the top of the throat, the feathers are like black velvet. The reſt of the under part of the plumage is of a ſhining white, except the legs, which are bluiſh. The eyes are brown; feet and nails black.—The female is

ſomewhat ſmaller than the male; her white is not ſo bright, and the blue aſſumes a ſhade of green upon the rump; there is no white between the eyes and on the throat; the front of the neck is white; the reſt of the under part cinereous grey.—The young one is dark green on all thoſe parts which in the adult are blue, and that is cinereous grey which is afterwards to become perfectly white. From a young one of this ſpecies Briſſon ſeems to have taken his deſcription of what he calls the little green ſhrike of Madagaſcar, *(lanius viridis;)* for they agree in general except in the length of the wings, which in this ſpecies really extend only about two-thirds the length, though in Briſſon they reach to the extremity. But Briſſon's meaſures and proportions are oftentimes very incorrect on account of the ſtuffed ſpecimens he deſcribes having been very badly prepared, the wings ſet on in the wrong place, &c.

This ſpecies lives entirely upon inſects; it is very ſhy, eſpecially the male, who is often ſeen perched on a buſh, but flies away upon the approach of any one. Being found not at Madagaſcar only, it has been thought better to call it ſimply the *blue ſhrike;* for the names of countries to deſignate certain ſpecies of birds are generally incorrect, as a bird has never been known to dwell in one part of a country excluſively; at leaſt ſucceeding travellers have commonly found the deficiency of ſuch names. Yet in cabinets of natural hiſtory it is very proper to note the country in which each ſpecimen was taken, and even the canton or province if poſſible; and in national collections, deſtined for general ſtudy, care ſhould be taken to collect of each ſpecies, the male, the female, the eggs, the young, the neſt, and all the varieties, if poſſible, from countries the fartheſt apart from each other. Our kingfiſher, for inſtance, is found not only throughout Europe, from the frozen regions of the north even to Italy, but alſo in Egypt, China, Bengal, &c. Had we

we then an opportunity of comparing ſpecimens from each of theſe different countries, we might be able to judge how far a ſpecies may vary, according to climate and alteration of food.—Lanius bicolor, *Gmel.* L. Madagaſcarienſis cæruleus, *Briſſ.* Loxia Madagaſcarina, *Linn.* Pie-grieche bleue de Madagaſcar, *Buff.* Blue ſhrike, *Lath.* Pie-grieche bleue, *Vaillant*, N° 73.

The FERRUGINOUS-BELLIED SHRIKE.—Body above black-brown; throat and breaſt dirty-white; belly ferruginous. Bill lead-colour; tail duſky-brown; legs black. Inhabits the Cape; nine inches long.—Lanius ferruginus, *Gmel.* Ferruginous-bellied ſhrike, *Lath.* Ruſty ſhrike, *Turton.*

The TABUAN SHRIKE.—Body above olive; chin and breaſt cinereous; belly yellowiſh-brown; tail and legs brown. Bill brown; crown greeniſh; temples olive-brown; wings black on the outer edge; ſecondary quill-feathers black-brown edged with dirty-white. Inhabits the Friendly Iſlands; near nine inches long.—Lanius Tabuenſis, *Gmel.* Tabuan ſhrike, *Lath.*

The PACIFIC SHRIKE.—Black; head and neck verging to greeniſh; belly and tail more duſky. Bill duſky, three quarters of an inch long; feathers of the head and neck very narrow; tail three inches long; toes divided to the baſe, the middle one very long. Inhabits the South-Sea Iſlands; eleven inches long.—Lanius Pacificus, *Gmel.* Pacific ſhrike, *Lath.*

The NORTHERN SHRIKE.—Bill black; legs lead-colour; body above brown; chin and breaſt cinereous; belly and vent browniſh. Noſtrils rounded, ſmall; at the baſe of the upper mandible five or ſix black briſtles; four middle tail-feathers brown, the reſt within white at the tip, all two inches long; legs ſhort; claws ſtrong, brown. Inhabits North America; near eight inches long.—Lanius ſeptentrionalis, *Gmel.* Northern ſhrike, *Lath.*

The BLACK-CAPPED SHRIKE.—Head black, creſted; body cinereous; throat and breaſt black; wing-coverts barred with white; tail tipt with white. Female without creſt; crown blackiſh; throat and breaſt cinereous. Inhabits Cayenne; ſix inches long.—Lanius pileatus, black-capped ſhrike, *Turton*.

The PANAY SHRIKE.—Bill and legs black; head, throat, breaſt, and belly, red; crown, wings, and tail, brown; irids fiery. Inhabits the iſland of Panay; ſeven inches long.—Lanius Panayenſis, *Gmel.* Piegrieche large de l'Iſle de Panay, *Sonnent.*

The WHITE SHRIKE.—White; bill, tail, legs, and greater part of the wings black. Primary quill-feathers with a white band. Inhabits Panay; nearly twice as large as the laſt.—Lanius albus, *Gmel.* Piegrieche blanche de l'Iſle de Panay, *Sonn.* White ſhrike, *Turton.*

The WHITE-SHOULDERED SHRIKE.—Body above aſhy-brown; chin and breaſt yellow-buff; belly, rump, and vent, dirty browniſh white; interſcapulars white; tail and wings brown; bill and legs black; front and cheeks with paler ſpots. Inhabits Braſil.—Lanius varius, *Gmel.* White-ſhouldered ſhrike, *Latham.*

The SPOTTED SHRIKE.—Body above black, beneath cinereous; all the wing-coverts with an oblong white ſpot. Bill and legs black; ſome of the feathers on the fore-part of the back tipt with white; quill-feathers edged with white; tail-feathers white at the tip. Inhabits Cayenne; ſix inches long.—Lanius nævius, *Gmel.* Spotted ſhrike, *Latham.*

The DUSKY SHRIKE.—Body above duſky-black, beneath white; over each eye a white line. Bill horn-colour; wings and tail more duſky than the body; legs brown. Inhabits America; ſize of the laſt.—Lanius obſcurus, *Gmel.* Duſky ſhrike, *Latham.*

The BROWN SHRIKE.—Body above brown, beneath white; lores, tips of the ſecondary quill-feathers, and

and edges of the primary, yellowiſh. Bill horn-colour, black at the tip; legs black. Lanius fuſcus, *Gmel.* Brown ſhrike, *Lath.*

The RED SHRIKE.—Red; wings and tail with eye-like ſpots, black at the tips. Inhabits Surinam. Lanius ruber, *Gmel.* Red butcher-bird of Surinam, *Bancroft.* Red ſhrike, *Lath.*

The BLACK-CROWNED SHRIKE.—Black; ſpot on the firſt quill-feathers, cheeks and chin white; breaſt and belly cinereous. Tail long; middle tail-feathers black, the reſt white at the tip; primary quill-feathers with a white ſpot; the ridge of each wing with a white ſpot. Inhabits North America.—Lanius Americanus, *Gmel.* Black-crowned ſhrike, *Pennant.*

The ITALIAN SHRIKE.—Cinereous; chin white; breaſt and belly roſy; front, line over the eyes, and tail, black. Quill-feathers black, the primary with a white ſpot near the baſe, the ſecondary white at the tip; outer tail-feathers white. Inhabits Italy, Spain, and Ruſſia; reſembles the *nengeta.*—Lanius minor, *Gmel.* Pie-grieche d' Italie, *Buff.*

The NOOTKA SHRIKE. — Tail rounded; body above black, beneath white; crown black; collar white. Bill and legs black; above the eyes a white line reaching to the nape, and a black one beneath the nape; leſſer wing-coverts black, greater white; firſt quill-feathers duſky edged with yellowiſh-brown, the ſecondary black edged and tipt with white; tail-feathers black, the four outer white at the tips. Inhabits Nootka Sound; ſeven inches long.—Lanius Natka, *Gmel.* from *Pennant.*

The BLACK-HEADED SHRIKE.—Bill, head, and chin, black; body olive, beneath paler; tail with a broad black band, yellow at the tip. Legs duſky. Inhabits the Sandwich Iſles; ſix inches long.—Lanius melanocephalus, *Gmel.* Black-headed ſhrike, *Penn.*

The SHORT-TAILED SHRIKE.—Top of the head ruſty-grey; eyebrows white; a black band from between

tween the eyes to the ears; body above aſhy-grey, beneath yellowiſh-white; tail rounded. Rump ruſty-iſh; chin and vent nearly white; wings blackiſh, the coverts grey at the tip; tail-feathers ten, brown-grey, and except the middle ones white at the tip. Inhabits Hungary; ſize of L. collurio.—Lanius brachyurus, *Gmel.* from *Pallas.* Short-tailed ſhrike, *Latham.*

The Boulboul.—Black; breaſt and belly tinged with aſh; wings brown, with two white bands. Bill and legs yellow. Inhabits India; ſize of a field-fare.—Lanius boulboul, *Turton's Linn.*

The Rufous-tailed Shrike.—Body above reddiſh-grey, beneath yellowiſh-white; tail long, rounded, and with the rump bright red; orbits croſſed with a black band. Inhabits rocky places on the river Onon; ſize of the laſt.—Lanius phœnicurus, *Gmel.* from *Pallas.* Rufous-tailed ſhrike, *Latham.*

The Pied Shrike.—This ſmall ſpecies is from Cayenne. It is about ſix inches and a half long. The top of the head is black, ſo are the wings and tail; the wing-coverts the ſame, with a white ſpot at the tip of each feather. The large quills are bordered exteriorly with a white line, which becomes broader on the outer ones. The two mid-quills are tipped with white; ſo are the reſt, but the ſpot is more apparent as the quills become ſhorter on each ſide; and the two laſt and ſhorteſt on each ſide have another white ſpot in the middle of their exterior barbs; the upper tail-coverts have a white ſpot alſo. The reſt of the plumage is ſlate-colour above, whiter underneath; the ſmall under wing-coverts are white. The bill and feet are blackiſh; the nails yellowiſh brown. Thus it appears on the whole variegated black and white; Vaillant calls it *tachet;* and conceives it to be a young one of the ſpecies under which we have placed it.—Lanius doliatus, *Linn.* and *Gmel.* Lanius Cayennenſis ſtriatus, *Briſſ.* Pie-grieche rayée de Cayenne, *Buff.* Black-and-white butcher-bird,

bird, *Edwards*. Pied ſhrike, *Lath.* Tachet, *Vaillant*, N° 77, fig. 1.

The CAYENNE RED SHRIKE.—This bird was alſo imported by Vaillant from Cayenne. It is ſomewhat ſtouter than the preceding, but ſimilar in many reſpects; the bill, feet, and wings, are ſhaped in the ſame manner. But this bird Vaillant decides to be a young one, which had not yet moulted; and he is doubtful to what ſpecies it belongs. Therefore the following deſcription may ſerve as a guide for ſome future naturaliſt who may have an opportunity of making farther enquiries on the ſpot where it inhabits.

The top of the head is of a bright red. The cheeks and throat are black variegated with reddiſh white, forming ſpots which extend into a kind of necklace. The ſame colours prevail between the eyes and noſtrils, but more obſcurely varied. The mantle, ſcapularies, wing-coverts, and outer barbs of the lateral wing-quills, are of a lighter red than the top of the head; the large primary wing-quills are alſo fainter; and all their inner barbs are black in the middle, edged with red in a zig-zag direction their whole length. The rump and upper tail-coverts are furniſhed with fine ſilky feathers of a pale red, which grows lighter ſtill on the breaſt, ſides, and under tail-coverts. The tail itſelf is dark red; it has a taper form, from the two outer quills on each ſide being ſhorter than the reſt. The wings when at reſt extend about half way down the tail. The bill, feet, and nails, are ſhining black like horn. The colour of the eyes could not be determined from the prepared ſpecimen.—Rouſſet, *Vaillant*, N° 77, fig. 2.

IN THE ORDER OF PICÆ.

PSITTACUS, THE PARROT.

GENERIC characters, Bill hooked; upper mandible moveable, (moſtly) covered with a cere; noſtrils rounded, placed in the baſe of the bill: tongue fleſhy, obtuſe, entire: feet formed for climbing.—In vol. iv. p. 205, we ſtated the manner of dividing and ſubdividing this numerous tribe, as it then obtained; but under the Linnæan ſyſtem the ſpecies are divided merely into thoſe with long and with ſhort tails. There are 169 ſpecies, beſides varieties; of which the following remain to be deſcribed.

I. *Tail long, wedge-ſhaped.*

The MILITARY MACAW.—Green; wings blue; front and tail red; cheeks moſtly naked, with feathered lines. Bill black; rump and tips of the tail-feathers blue.—Pſittacus militaris, *Gmel.* Largeſt Guiana parrot, *Bancroft.* Great green macaw, *Edw.* Military macaw, *Latham.*

The HYACINTHINE MACAW.—Violet-blue; head and neck paler; chin and orbits yellow, naked. Nearly the ſize of the former; bill large, black; wings edged with greeniſh; legs blackiſh-aſh.—Pſittacus byacinthinus, *Turton's Linn.*

The OBSCURE PARROT.—Brown; cheeks red, naked; crown varied with blackiſh and aſh; tail cinereous. Bill, frontlet, legs, and claws, black; orbits white; irides yellow; crown and upper ſurface of the wings black; belly cinereous. Inhabits Africa; ſize of a magpie.—Pſittacus obſcurus, *Gmel.* from *Haſſelquiſt.* Obſcure parrot, *Lath.*

The TABUAN PARROT.—Head, neck, breaſt, and belly, purple; back and wing-coverts green; crown terminated by a lunular blue mark; firſt quill-feathers and greater part of the tail blue. Bill black; lower mandible ſurrounded at the baſe with green feathers;

feathers; ſpurious wings blue; ſecondary quill-feathers green edged with blue; two middle tail-feathers blue, eight inches long, edged and tipt with green, the reſt blue with black ſhafts; legs duſky. Inhabits the Friendly Iſlands; nineteen inches long.—Pſittacus Tabuenſis, *Gmel.* Tabuan parrot, *Latham.*

There is a variety, which is green; head, neck, breaſt, and belly, ſcarlet; neck terminated by a lunular blue mark; wings green; rump blue; tail deep blue. Inhabits New South Wales; wing-coverts croſſed by a light yellowiſh-green bar; legs cinereous.—*Turton.*

The PAPUAN PARROT.—Head, neck, and breaſt, red; hind-head with a blue ſpot and two black creſcents; wings and part of the back green; reſt of the back, belly, and tip of the tail, red. Bill red; wings ſhort; hind part of the back with a longitudinal ſtripe blue in the middle; each ſide of the wings an oblong blue ſpot; two-thirds of the tail green, reſt yellow; legs red. Inhabits Papua; ſixteen inches long.—Pſittacus Papuenſis, *Gmel* Petit lori Papon, *Sonnerat.* Papuan lory, *Lath.*—There are three varieties.

The BEAUTIFUL PARROT.—Head, neck, and body, beneath red, above brown; interſcapulars pale blue, mixed with red; tail greeniſh-brown, tipt with white. Bill yellowiſh-brown. Inhabits the Molucca Iſlands, fifteen inches long.—Pſittacus elegans, *Gmel.* Beautiful lory, *Lath.*—The variety β is ſmaller, and green above, inſtead of brown.—*Lath.*

The VIOLET PARROT.—Head and body above brown, beneath violet; ſhoulders blue; tail and wings green and red. Bill black; irids golden-yellow. Inhabits near the Amazon river.—Pſittacus ianthinus, *Gmel.* Perroquet violet, *Fermin.*

The VARIEGATED PARROT.—Scarlet; nape, beginning of the back, breaſt, and belly, purple blue; wings above red, beneath yellow; tail green. Bill duſky; hind part of the belly verging to greeniſh-

black; tail-feathers within red at the baſe, without blue towards the tip. Inhabits India; ten or eleven inches long.—Pſittacus variegatus, *Gmel.* Variegated lory, *Lath.*

Pennant's Parrot.—Scarlet; fore-part of the back black waved with ſcarlet; ſides and throat blue; quill-feathers each with a white ſpot. Wing-coverts bluiſh-green; outer tail-feathers tipt with white; female with the crown blood-red; back and belly green; thighs and vent red. Inhabits New South Wales; fifteen inches long.—Pſittacus Pennantis, *Turton.*

The Nonpareil Parrot.—Head, throat, breaſt, and vent, crimſon; back black waved with yellow-green; wings and tail blue. Rump and two middle tail-feathers green; quill-feathers dark-brown; legs lead-colour. Inhabits New Holland; nearly the ſize of the laſt.—Pſittacus eximius, *Turton.*

The Splendid Parrot.—Bright blood-red; back-feathers edged with black; chin, wings, and tail, blue. Body beneath paler; ſhoulders of the wings black; wing-coverts blue, the ſecondary tinged with green; primary quill-feathers black, ſecondary blue, rump red; two middle tail-feathers green; bill pale; legs and claws aſh; female leſs brilliant; back olive-green. Inhabits New Holland; ſixteen inches long.—Pſittacus glorioſus, *Turton.*

The New-Guinea Parrot.—Black with a bright blue tinge; tail beneath red; orbits naked, brown. Bill and legs blackiſh; irids with two circles, the outer blue, inner and leſſer browniſh-red; bill and legs blackiſh.—Pſittacus Novæ Guineæ, *Gmel.* Lori noir de la Nouvelle Guinée, *Sonn.* Black lory, *Lath.*

The Pale Parakeet.—Yellow; wings whitiſh ſlightly tinged with roſy, and a caſt of greeniſh, according to the direction of the light. Inhabits Andaluſia;

luſia; about ſeven inches long.—Pſittacus pallidus, *Turton. Nat. Miſcel.* 258.

The LEVERIAN PARROT.—Pale-green; head and neck yellow; quill-feathers and tips of the tail-feathers blue; rump crimſon. Inhabits Southern Aſia.—Pſittacus Leverianus, *Gmel.* Crimſon-vented parrot, *Lath.*

The CHILESE PARROT.—Green; quill-feathers brown at the tip; orbits tawny. Inhabits Chili; lives in flocks; feeds on buds of trees and plants; fleſh ſavoury.—Pſittacus jaquilina, *Gmel.* from *Molina.*

The VARIED-WINGED PARROT.—Green; wing-coverts black; the leſſer edged with yellowiſh-brown, the greater with blue. Frontlet ſhining-green; bill large fleſh-colour; irids white; crown blue; body above graſs-green, beneath yellowiſh-green; legs blackiſh. Inhabits Luzonia.—Pſittacus marginatus, *Gmel.* Perruche de l'iſle de Luçon, *Sonnerat.* Varied winged parrot, *Latham.*

The BLUE-COLLARED PARROT.—Green; collar blue; ſpot on the origin of the wings red. Bill and irids red; head, neck, and belly, greyiſh-green; wings and back graſs-green; two middle tail feathers graſs-green, the reſt grey-green; legs blackiſh-grey. Inhabits Luzonia.—Pſittacus Sonnerati, *Gmel.* Perruche à collier de l'iſle de Luçon, *Sonn.* Blue-collared parrot, *Lath.*

The SPOT-NECKED PARROT.—Green; with two oblong black ſpots on the neck, and a large ſulphur-colour ſpot on each wing. Bill pale blood-red; forehead, chin, throat, cheeks, and ſides of the neck, orange-yellow; chin and throat each ſide with a large oval black ſpot.—Pſittacus bimaculatus, *Turton.*

The BROWN-FRONTED PARAKEET.—Green; bill, legs, and orbits, lead-colour; front, cheeks and chin, brown; edges and tips of the tail-feathers blue. Irids cheſnut; crown bluiſh; quill-feathers edged with blue. Inhabits tropical regions of America;

eleven inches and a half long.—Pſittacus plumbeus, *Gmel.* Brown-fronted parakeet, *Lath.*

The Buff-fronted Parakeet.—Green above, yellowiſh-green beneath; front buff. Bill duſky; crown and quill-feathers blue; legs duſky-red. Inhabits Cayenne; ten inches long.—Pſittacus bubalinus, *Turton.*

The Dubious Parrot.—Green; neck reddiſh; orbits yellow, naked. Bill and legs pale horn-colour; quill-feathers and four middle tail-feathers tipt with blue, outer tail-feathers tipt with yellow; nine inches long.—Pſittacus dubius, *Turton.*

The Orange-bellied Parrot.—Green; belly orange; bill greeniſh. Greater wing-coverts outſide blue, within each marked with a white ſpot; four outer tail-feathers each ſide tipt with yellow; legs greeniſh.—Pſittacus chryſogaſter, *Turton.*

The Waved Parakeet.—Green; head and chin brown, the latter waved with tawny; wings blue with a flame-colour bar; belly pale bluiſh-purple with brown waved lines. Bill, legs, and claws, black; irides flame-colour; frontlet above ſlate-colour, beneath ſky-blue; tail with a longitudinal lilac line, beneath red-brown. Inhabits Cayenne and Surinam; eight inches long.—Pſittacus verſicolor, *Gmel.* Peruche à gorge variée, *Buff.* Waved-breaſted parakeet, *Latham.*

The Scaly Parakeet.—Green; feathers of the head, neck, and breaſt, edged with orange. Shoulders ſcarlet; rump and middle of the belly blood-red; bill and legs duſky; orbits pale, naked. Inhabits Cayenne; eight inches and a half long.—Pſittacus ſquamoſus, *Turton.*

The Horned Parrot.—Green; head ſcarlet, with two long feathers ſtanding out like horns; collar and rump ſtraw-colour; outer edge of the quill and tail-feathers blue. Bill and legs black-blue; temples orange; irides golden; wing-coverts within and at the tip duſky; tail beneath black. Inhabits New Caledonia;

Caledonia: eleven inches long.—Pſittacus cornutus, *Gmel.* Horned parrot, *Lath.*

The CALEDONIAN PARROT.—Olive; crown greeniſh-yellow; tail-feathers whitiſh at the tip, the outer edges of the four outermoſt pale blue. Bill bluiſh, pale at the tip; frontlet above red, beneath blue; body above inclining to green, beneath to yellow; legs black blue. Inhabits New Caledonia; twelve inches long.—Pſittacus Caledonicus, *Gmel.* Caledonian parrot, *Lath.*

The RED-RUMPED PARROT.—Green; front purple; crown greeniſh-tawny; a red ſtripe from the baſe of the bill through the eyes; tail-feathers bluiſh, the two middle ones edged with green; rump red. Bill deep blue tipt with black; a few feathers on the crown pale yellow, and on the middle of the back pale ruſty-brown; temples pale green; belly aſhy-green; firſt quill-feathers brown, ſecondary and ſpurious wings duſky edged with green, and tipt with pale ruſty; legs black. Inhabits New Zealand; fifteen inches long.—Pſittacus Novæ Seelandiæ, *Gmel.* Red-rumped parrot, *Lath.*

The CRESTED PARAKEET.—Olive; creſted head and chin yellow; behind the eyes a red ſpot; an oblique white band acroſs the wings. Bill pale; creſt conſiſting of ſix ſlender feathers, two of which are near three inches long, the reſt ſhorter; legs duſky; female head and body more tawny; rump and tail with tranſverſe grey lines. Inhabits New Holland; twelve inches long.—Pſittacus Novæ Hollandiæ, *Gmel.* Creſted parakeet, *Lath.*

The NEW-WALES PARROT.—Green; four middle tail-feathers barred with green and black, the reſt with black and yellow. Wing-coverts green barred with black and yellow; quill-feathers green without, black within, with two yellow ſpots on the middle, except the three outer, which have a ſingle yellow ſpot within; two middle tail-feathers nine, the reſt three,

three, inches long. Inhabits New South Wales; ſize of the laſt.—Pſittacus formoſus, *Turton.*

The Society Parrot.—Olive; head black-brown; rump duſky-red; wings and tail duſky. Bill black-blue tipt with black; feathers edged with duſky beneath inclining to yellow; legs black. Inhabits Ulietea; ten inches and a half long.—Pſittacus Ulietanus, *Gmel.* Society parrot, *Lath.*

The White-collared Parrot.—Green; head, chin, and belly, blue; fore-part of the breaſt red, hind-part and tail beneath yellow; collar white. Inhabits India; bill red; head with a white creſcent.—Pſittacus multicolor, *Gmel.* White-collared parrot, *Lath.*

The Lineated Parrot.—Green; quill-feathers beneath brown, the inner edge pale. Size of a turtle-dove; colour beneath verging to yellow; wings beneath with narrow pale lines; tail longer than the body.—Pſittacus lineatus, *Gmel.*

The Crimson-fronted Parakeet.—Green; ſpot behind the eyes and front crimſon; crown bluiſh. Bill tawny tipt with black; legs duſky. Inhabits New Holland; ſize of a turtle dove.—Pſittacus concinnus, *Turton.*

The Pacific Parakeet.—Green; ſpot behind the eyes and each ſide of the rump red; front red; outer edge of the wings blue; tail beneath aſh. Bill ſilvery tipt with black; legs brown; claws black. Inhabits the Pacific Iſlands; twelve inches long.—Pſittacus Pacificus, *Gmel.* Pacific parakeet, *Lath.*—There are ſix varieties, differing in colour.

The Palm Parrot.—Green; bill and legs red; quill-feathers tipt and edged with black. Colour beneath pale; belly and tip of the tail yellowiſh. Inhabits Tanna Iſland, among palm-trees; eight inches long.—Pſittacus palmarum, *Gmel.* Palm parrot, *Lath.*

The Blue-crested Parakeet.—Green; crown blue, creſted with long feathers; chin and middle of the

the belly red; thighs purple. Bill orange; front pale green; two middle tail-feathers green tipt with yellow, the reſt yellowiſh edged and tipt with green; legs duſky; claws black. Inhabits Sandwich Iſlands; ſix inches and a half long.—Pſittacus auſtralis, *Gmel.* Blue-creſted parakeet, *Lath.*

The PEREGRINE PARAKEET.—Green; on each wing a longitudinal brown ſpot. Bill, legs, and feet, red.—Inhabits the Pacific Iſlands; eight inches long.—Pſittacus peregrinus, *Turton.*

The BLUE PARAKEET.—Body entirely of a ſplendid full blue. Inhabits Otaheite; probably a variety of the Taitianus.—Pſittacus cyaneus, *Turton.*

The TIMID PARAKEET.—Olive-brown; frontlet ſcarlet; tail-feathers within near the baſe ſcarlet. Bill blackiſh, circled at the baſe with ſcarlet feathers; body beneath paler; tail-feathers, except the two middle ones, on the upper half within ſcarlet; legs blue. Inhabits New South Wales; ſeven inches long.—Pſittacus puſillus, the timid parakeet, *Turton.*

The PIGMY PARAKEET.—Green; feathers tipt with greeniſh-yellow; quill-feathers within duſky. Bill whitiſh; cere duſky; legs lead-colour. Inhabits the Pacific Iſles; ſix inches long.—Pſittacus pygmæus, Pigmy parakeet, *Lath.*

The RED-SHOULDERED PARAKEET.—Green; frontlet crimſon; crown and outer edge of the wings deep blue; ſhoulders and wings beneath blood-red. Body beneath inclining to yellow; fore-part of the neck mixed with crimſon; primary quill-feathers duſky edged without with yellow, two or three of the inner and vent pale red; tail-feathers near the rump cheſnut, growing dull blue towards the extremity; bill and legs brown. Inhabits New South Wales; ten inches and a half long.—Pſittacus ſanguinolentus, the red-ſhouldered parrot, *Turton.*

II. *Tails ſhort, equal at the end.*

The Crowned Cockatoo.—Green; creſt plicatile, red tipt with blue. Front yellow; creſt ſcarlet tipt with bright blue; outer tail-feathers blue on the outer ſides; vent red, the feathers tipt with blue. Inhabits Guiana and Surinam; eighteen inches long. —Pſittacus coronatus, *Gmel.* Cockatoo of Guiana, *Bancroft.* Crowned cockatoo, *Lath.*

The Funereal Cockatoo.—Black; middle of the tail ſtraw-colour freckled with black. Inhabits New Holland; nearly as large as the *aterrimus.*—Pſittacus funereus, *Turton.*

The Banksian Cockatoo.—Splendid black; creſt ſmall; head and wing-coverts dotted with buff; outer tail-feathers ſcarlet in the middle, barred and tipt with black. Bill large, deep brown; two middle tail-feathers black; legs brown. Inhabits New Holland; ſize nearly of the preceding.—Pſittacus Bankſii, *Turton.*

β. Sides of the neck, chin, and throat, yellow. Feathers of the creſt varied with yellow: ſides of the neck variegated yellow and black. Inhabits with former; twenty-two inches long.

γ. Duſky-brown inclining to olive; tail, except the two middle feathers, croſſed with a broad bar. Twenty-two inches long; lower part of the back, wings, and rump, gloſſy-black; legs and claws black.

The New-Wales Cockatoo.—White; creſt long, folding, pointed, ſulphur; baſe of the tail ſulphur. Bill blackiſh; orbits feathered; crown behind the creſt bald; legs blackiſh. Inhabits New South Wales; two feet three inches long.—Pſittacus galeratus, *Turton.*

The Red-vented Cockatoo.—White; creſt folding, ſulphurous, white at the tip; orbits yellowiſh-red; lower tail-coverts red dotted with white. Bill white, generally cinereous at the baſe; cere grey; orbits

orbits yellowiſh-red; lower creſt-feathers pale red; two middle tail-feathers white, the lateral ones within as far as the middle ſulphurous; legs and claws lead-colour. Inhabits the Philippine Iſlands; thirteen inches and a half long. — Pſittacus Philippinarum, *Gmel.* Cacatua minor, *Briſſ.* Petit kakatoes à bec couleur de chair des Philippines, *Buff.* Red-vented cockatoo, *Brown* and *Latham.*

The CINEREOUS PARROT.—Entirely bluiſh-aſh. Inhabits Guinea; larger than the hoary parrot. — Pſittacus cinereus, *Gmel.* and *Briſſ.* Maracana, *Will.* and *Ray.* Cinereous parrot, *Lath.*

The SOUTHERN PARROT.—Above greeniſh-aſh, beneath bright-bay; orbits, crown, hind-head, and neck, cinereous; feathers tipt with brown. Bill bluiſh-black; legs black. Inhabits New Zealand; ſixteen inches long. — Pſittacus meridionalis, *Gmel.* Southern brown parrot, *Latham.*

The BROWN PARROT.—Entirely brown-aſh; thirteen inches long.—Pſittacus fuſcus, *Gmel.* Brown parrot, *Lath.*

The COCHINCHINA PARROT.—Blue; front, nape, lower part of the neck, breaſt, and middle of the belly, ſcarlet. Bill yellow; wing-coverts, quills, and tail, with a black croſs bar; legs black. Inhabits Cochinchina.—Pſittacus Cochinchinenſis, *Turton.*

The YELLOW-BREASTED LORY. — Head and neck ſcarlet; eyebrows and breaſt yellowiſh; wings yellow-green tipt with blue; belly, vent, and under-part of the tail, hoary tipt with ſcarlet. Bill black; cere, chin, and orbits, white; claws black. Inhabits Guinea, ten inches long. — Pſittacus Guineenſis, *Gmel.* Yellow-breaſted lory, *Lath.*

The VARIEGATED PARROT.—Varied with brown and blue; cheeks, chin, and throat, whitiſh; quill and tail-feathers duſky-brown, the outer webs blue. Bill and legs yellowiſh; claws black. Inhabits South

America; above five inches long.—Pſittacus varius, *Gmel.*

The FINCH PARROT.—Green; head blue; cheeks, chin, throat, and ſpot on the belly, white with a bloody hue; belly violet. Tail-feathers on the inner-ſide and tip, bill and legs, yellow; claws browniſh. Inhabits South America; above ſix inches long.—Pſittacus fringillaceus, *Gmel.*

The CHILI PARROT.—Green; beneath aſh; orbits carnation. Inhabits Chili; reſembles in manners and food Pſ. jaguilma.—Pſittacus choræus, *Gmel.* from *Molina.*

The GRISLED PARROT.—Green; head and breaſt greeniſh-grey; wing-coverts yellow. Bill red, almoſt as large as the head; irids bluiſh. Inhabits China; twelve inches long.—Pſittacus naſutus, *Turton.*

The AMBOYNA PARROT.—Green; beneath olive; front and crown blue; tail beneath yellow. Inhabits Amboyna; ſixteen inches long; legs lead-colour.—Pſittacus gramineus, *Gmel.* Grand perroquet verd à tête bleue d'Amboyne, *Buff.* Amboina parrot, *Lath.* Graſs-green parrot, *Turton.*

GERIN'S PARROT.—Green; head white; ſhoulders, ſome of the middle quill-feathers and tail-feathers within, at the baſe red. Bill and legs pale; leſſer wing-coverts red. Inhabits Braſil; ſize of the laſt.—Pſittacus Gerini, *Turton.*

The YELLOW-HEADED PARROT.—Green; crown yellow; wing-coverts red; quill-feathers variegated with green, black, violet, and red; two outer tail-feathers within red at the baſe. Bill cinereous, red at the baſe; irids yellow; legs lead-colour; claws black. Inhabits South America; ſixteen to eighteen inches long.—Pſittacus ochrocephalus, *Gmel.* Pſ. Amazonius Braſilienſis, *Briſſ.* Amazone à tête jaune, *Buff.* Yellow-head Amazon parrot, *Latham.*—There are two other varieties.

The ASH-FRONTED PARROT.—Green; orbits and front

front cinereous; crown, cheeks, chin, throat, and leſſer wing-coverts, yellow, the greater blue; many of the primary quill-feathers without violet, the reſt from the baſe to the middle red, and afterwards blue. Bill corneous; legs aſh; claws black. Inhabits Barbadoes; ſize of a pigeon. — Pſittacus Barbadenſis, *Gmel.* Aſh-fronted parrot, *Latham.*

The MANILLA PARROT.—Green; hind-head and rump blue; wings marked with black, blue, and red. Bill ſcarlet tipt with white; cere reddiſh; legs cinereous; claws blackiſh. Inhabits Luzonia; twelve inches and a half long.—Pſittacus Lucionenſis, *Gmel.* and *Briſſ.* Manilla green parrot, *Latham.*

The BLUE-COLLARED PARROT. — Yellowiſh-green; collar blue; rump red. Inhabits Chili; larger than a pigeon; docile and eaſily tamed; is troubleſome in corn-fields, and makes its neſt in rocky precipices; fleſh eatable.—Pſittacus cyanolyſeos, *Gmel.* from *Molina.*

The CRIMSON-WINGED PARROT.—Green; orbits blackiſh; middle of the back black, lower part blue; wing-coverts red. Bill red; cere and legs dirty; back of the female green. Inhabits New South Wales; ten inches and a half long.—Pſittacus erythropterus, *Gmel.* Crimſon-winged parrot, *Latham.*

The ROBUST PARROT.—Green; head ſomewhat aſh; wing-coverts dirty black edged with green; ſpot on the wings red. Size of a pigeon. Bill large, white; frontlet above blackiſh; feathers of the crown ſtriped in the middle with a dirty colour; legs dirty aſh.—Pſittacus robuſtus, *Gmel.* Robuſt parrot, *Latham.*

The NEW GUINEA GREEN PARROT. — Green; greater quill-feathers blue, leſſer beneath red. Upper mandible orpiment-yellow, lower black; irides flame-colour; body graſs-green. Inhabits New Guinea; ſize of a pigeon.—Pſittacus magnus, *Gmel.* Grand per-

roquet verd de la Nouvelle Guinée, *Buff.* New Guinea green parrot, *Lath.*

The EASTERN PARROT.—Green; outer edge of the wings and primary quill-feathers bluiſh; tail yellow at the tip. Bill red, tipt with yellow; legs yellow. Inhabits India; ſize of the laſt.—Pſittacus orientalis, *Turton.*

The BLUE CHEEKED PARROT.—Green; cheeks and wings blue; back on the fore-part black with yellow ſtreaks, hind-part yellowiſh. Bill and crown pale yellow; vent red; legs duſky. Length eleven inches and a half.—Pſittacus adſcitus, *Turton.*

The BATAVIAN PARROT.—Green with yellow ſtreaks; hind-head and nape blackiſh; face and thighs ſcarlet. Bill black; legs aſh. Inhabits Batavia.—Pſittacus Batavenſis, *Turton.*

The SCARLET-HEADED PARROT.—Green; crown and front ſcarlet; rump greeniſh-yellow; quill and tail-feathers blue without. Bill pale horn; cheeks naked; outer edges of the wings yellow; tail tipt with yellow. Size of the miſſel thruſh.—Pſittacus coccinocephalus, *Turton.*

The RED-FRONTED PARROT.—Pale green; lunule on the front red; ſpot on the middle of the wings yellow. Bill fleſh-colour; tail very ſhort; legs and claws grey. Inhabits Braſil; ſize of a lark.—Pſittacus tuipara, *Gmel.* Tuipara tupinambis, *Will.* and *Ray.* Pſittacula Braſilienſis erythrocephalus, *Briſſ.* Red-fronted parrot, *Lath.*

The MALACCA PARROT.—Green; front and rump blue; under wing-coverts red. Bill greyiſh-violet; irids red; legs brown. Inhabits Malacca; ſize of the laſt.—Pſittacus Malaccenſis, *Turton.*

The RED-NAPED PARROT.—Green; front and ſemilunular ſpot on the nape, under part of the throat and breaſt, ſcarlet. About the ſize of the laſt; tail green.—Pſittacus cervicalis, red-naped parrot, *Turton.*

The INDIAN PARROT.—Green; orbits pale fleſh-colour; crown red or orange; hind-part of the rump red;

red; quill-feathers within and tail without bluiſh-green. Bill orange; upper tail-coverts red; legs and claws fleſh-colour. Inhabits India; ſize of a lark. —Pſittacus Indicus, *Gmel.* and *Briſſ.* Red-and-green Indian parrot, *Lath.*

The VERNAL PARROT. — Bright green; wings paler; throat, rump, and tail, blood-red. Bill pale reddiſh; wing-coverts full green; tail beneath blue: body beneath paler green; legs pale. Size of the laſt.—Pſittacus vernalis, *Turton.*

The PURPLE-TAILED PARAKEET.—Green; crown and neck cinereous; rump, edge of the wings, and tips of the ſpurious wings, blue; tail purple edged with black. Bill yellowiſh; lower part of the back blue; ſhoulders brown; tail-coverts very long; two middle tail-feathers green dotted with black; legs cinereous; claws yellowiſh. Inhabits Cayenne; eight inches long. —Pſittacus purpuratus, *Gmel.* Purple-tailed parakeet, *Lath.*

The RED-TAILED PARAKEET. — Green; head creſted; wings and tail red. Size of a blackbird; creſt conſiſting of ſix feathers, three of which are longer, moveable at pleaſure.—Pſittacus erythrochlorus, *Gmel.* and *Ray.* Pſittacula criſtata, *Briſſ.* Creſted red and-green parakeet, *Latham.*

The MEXICAN PARAKEET.—Green; front creſted; wing-coverts and tail purple; orbits blue; chin yellow; neck red. Bill yellow; quill-feathers edged with white; legs and claws cinereous. Inhabits New Spain; ſeven inches long. — Pſittacus Mexicanus, *Gmel.* and *Briſſ.* Avis de choca, *Seba*, i. 94. t. 39. fig. 2. Creſted Mexican parakeet, *Lath.*

RAMPHASTOS, THE TOUCAN.

The TOOTHLESS TOUCAN.—Bill not ſerrate at the edges. Body above green, beneath greeniſh-yellow; head and neck cheſnut; rump red; mandibles upper brown, lower black; thighs green; probably

bably only a variety of the green toucan, vol. iv. p. 295. Inhabits Cayenne; twelve inches long.—Ramphaſtos edentulus, *Turton.*

The Fish-eater. — Blackiſh; abdominal band and vent red; rump white. Bill yellow with a ſcarlet ſpot on the tip, lower mandible blue; cap, back, wings, tail, belly, and thighs, black; temples, chin, breaſt, and rump, white. Inhabits South America; twenty-one inches long. — Ramphaſtos piſcivorus, *Gmel.* Toucan à gorge blanche de Cayenne, *Buff.* Braſilian toucan, *Lath.*

The Red-beaked Toucan.—Blackiſh; cheeks, chin, and throat, white; upper tail-coverts ſulphur, lower and creſcent on the breaſt red. Baſe and back of the bill yellow, tip of the upper mandible and hollow of the lower, red; noſtrils edged with black; orbits bluiſh; legs plumbeous; claws black. Inhabits South America; ſize of the laſt.—Ramphaſtos erythrorhynchos, *Gmel.* Red-beaked toucan, *Lath.*

The Indian Toucan.—Throat, quill-feathers, and tail, black; cheeks and breaſt white; belly and thighs yellow; crown reddiſh-orange; rump crimſon. Bill hardly ſerrate, and not ſo large as in others. Inhabits India.—Ramphaſtos Indicus, *Turton.*

The Doubtful Toucan.—Chin blue.—Ramphaſtos dubius, *Turton.* Blue-throated toucan, *Lath.*

The White Toucan.—Entirely white.—Ramphaſtos albus, *Turton.* White toucan, *Lath.*

The Parrot Toucan. — Bill large, convex, ſharp-edged, channelled at the ſides, hooked at the point; noſtrils naked, rounded, at the baſe of the bill; tongue cartilaginous, ſplit at the point; feet climbers. Bill pale brown tipt with yellowiſh, convex, keeled; noſtrils ſurrounded with a red wrinkled ſkin; orbits naked; head, neck, and under parts of the body pale bluiſh-grey; back, wings, and tail, cinereous, the feathers moſtly with duſky-blackiſh tips; tail long, wedged, the two mid-

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dle feathers eleven inches, all barred with black near the end, and tipt with white; legs ſhort, ſcaly, and with the hooked claws black. Inhabits New South Wales; ſize of a crow, but from the length of the tail meaſures two feet two inches long.—Scythrops (a new genus) pſittacus, *Turton.*

BUCEROS, THE HORNBILL.

The generic characters have been given at vol. iv. p. 300. but Vaillant obſerves, that there is no genus of birds which exhibits ſo much variety as the hornbills; the ſhape of the bill is formed upon a different model in almoſt every ſpecies, ſo that each of theſe birds would ſeem to belong to a ſeparate genus if the bill were taken for the diſtinguiſhing mark. Some ſpecies have the bill not only very large, but monſtrouſly formed, by the addition of protuberances or excreſcences riſing upon them in infinitely varied forms; yet, with all this formidable appearance, formed by nature as it were in a playful moment, there is no real ſtrength; for the ſmalleſt bird, a ſparrow for example, ſays Vaillant, can bite harder than this large animal. Buffon, who ſaw one of theſe birds alive, has well obſerved, that the large beaks of the hornbills and of many of the large toucans, could not have any ſtrength for want of purchaſe; he very properly compares them to a long lever too far removed from the point of reſiſtance.

The ſhape of the bill varies not only in each ſpecies, as remarked above, but alſo (what no writer before Vaillant obſerved) in the ſame ſpecies at different ages, eſpecially in thoſe ſurmounted with the excreſcences by naturaliſts called helmets; for the helmeted hornbills have when firſt hatched the bill almoſt ſimple; and even thoſe which are deſtined to bear the largeſt protuberance, have when young only a ſmall riſing or creſt, which changes its form and unfolds itſelf by degrees as the bird advances to a

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ſtate of maturity; and the largeſt aſſume ſeveral different forms before they attain their full ſize, even the forms of the helmets of other ſpecies. Want of attention to this circumſtance has occaſioned the ſame bird to be called by different names, and has greatly confuſed the diſtinction of ſpecies; but this has happened in regard to many other kinds beſides the hornbills. Laſtly, there are ſome which appear to have no helmets; theſe however are doubtful ſpecies; two of them will be deſcribed and figured farther on.

Though nature has produced ſuch a diverſity of ſhape with reſpect to the bill, the conſtruction of the feet is uniform in all the ſpecies: theſe are covered with broad ſcales; there are three toes in front, nearly equal, and almoſt united at their origin; indeed, from the figure Vaillant has given ſeparately of the foot, it appears that the outer toe is connected with the middle one as far as the third articulation, but the inner one only to the firſt joint; forming abſolutely what we call a ſole to the foot, covered with a hard rough ſkin like ſhagreen; the hind toe is alſo broad and flat; ſo that theſe birds ſeem to have a broad and firm tread; yet it is obſervable that they walk very ill, generally jumping with both feet together when on the ground; hence they alight but ſeldom, and merely to ſeize their prey; and generally prefer to perch on the largeſt trees, eſpecially hollow or withered trees, in the holes of which they retire to rooſt, or even to make a neſt.

All the ſpecies have eye-laſhes to the upper lid; and a very ſmall cartilaginous tongue faſtened to the bottom of the throat. They unite in large flocks; their principal food is inſects, lizards, and frogs; they hunt down ſuch ſmall quadrupeds as are unable to defend themſelves, which they kill and devour whole; and they will eat remnants of carcaſes or carrion. When tamed or domeſticated, they may be brought

to live upon fruit, pulſe, and bread, as Buffon remarked of the bird he ſaw; but their natural food certainly is fleſh. In India however it is now aſcertained that they feed upon the *nux vomica*. One of theſe birds, purchaſed by Captain John Campbell, was opened by his orders, before ſeveral reſpectable gentlemen, at Midnapore, and in its craw were found ſeveral ſeeds of the nux vomica. Theſe birds at particular ſeaſons grow very fat, and this ſeaſon appears to be when the fruit of the nux vomica prevails, about the month of December. The natives of Hindooſtan make uſe of the fat, and alſo of the fleſh and bones, as a medicine. The caſes they uſe it in are the contractions which ſometimes proceed from catching cold after the uſe of mercury; it is applied to alleviate and remove violent pains, that often ſucceed venereal complaints, called by the natives *guttea ke azar*. It is alſo uſed in very cold weather, when the pores of the ſkin are affected; for, being in its nature extremely hot, in this caſe it cauſes a free perſpiration. The mode they apply it in is this: they reduce the fat to an ointment, at the ſame time mixing with it every kind of ſpice, pepper, cloves, cardamums, &c. the fleſh is alſo mixed in the ſame manner; the ointment is rubbed into the part affected every night when they go to ſleep, and a certain portion of the meat is eaten in the morning riſing; the gall is alſo uſed by the native women in caſes of ſterility. In ſhort, the medicinal properties of this extraordinary bird are held in the higheſt eſtimation; and they ſpeak of it with a degree of admiration bordering on enthuſiaſm. The hard part of the bill of birds in general, which is only a prolongation or production of the jaw-bones, is generally covered with a horny ſubſtance which forms a ſheath, and is ſo diſtinct that it may even be drawn off entire, like a ſcabbard from a ſword; but in the preſent genus this horn is more attached, and cannot

be drawn off entire. As to the helmet which crowns the beak of moſt of theſe birds, it is almoſt entirely hollow, conſequently very light, otherwiſe the head would be inconveniently loaded with a weight ſometimes larger than the bill itſelf; in fact the greater part of it is a thin diaphanous ſubſtance yielding to the preſſure of the finger; but a certain part, at the top of the upper mandible, is of a bony ſubſtance, but very porous, divided by thin brittle partitions, which give it the look of filagree-work; this part is larger or ſmaller according to the ſize the helmet is to be of; and probably it furniſhes the moiſture or humour neceſſary to its growth, ſince, as before hinted, it does not attain its full ſize till after ſome years.

Vaillant farther obſerves, that the edges of the bill are very ſubject to break, which produces irregular notches, though theſe birds have in general the bill more or leſs ſerrated; but theſe accidental ſerratures are filled up every year, the horn of the bill puſhing out of itſelf at every moult, as may be eaſily diſcerned by remarking the different ſhades of theſe fillings-up. Buffon, who did not obſerve this, ſays that other naturaliſts have miſtaken theſe cracks for regular ſerratures; he was not aware of the conſtant reproduction of theſe broken parts, by which the bill is continually brought back to its natural ſhape; for he ſays, "by the ſubſtance and formation of the bill, it ſeems not made to laſt, but rather to *deſtroy itſelf without reſource*, by the very uſes to which it is deſtined." Vaillant however aſſerts, that the horny part of the mandibles is reproduced in all birds when broken by any accident; he had often obſerved it in thoſe which make the greateſt efforts with their bills, as birds of prey, and parrots which crack the hardeſt nuts for their ſubſiſtence. The lovers of natural hiſtory have great obligations to M. Vaillant for his reſearches, which have occupied him for thirty years; in particular he has thrown great light upon the hiſtory

of

of this genus of birds, of whom hitherto little was known.

The PHILIPPINE HORNBILL.—Of this ſpecies we have given rather an imperfect account in vol. iv. p. 308. Petiver and Willughby firſt wrote of this large Indian hornbill; Briſſon gave a deſcription of it, which was copied by Buffon; but, having ſeen only the bill, they gave no figure of the bird. It is properly named by Gmelin *bicornis*, or two-horned, ſince the helmet comes forward in two points over the beak: he gives it the ſize of a fowl, while Briſſon and Buffon compare it to a turkey; neither had ſeen the bird itſelf, therefore we muſt have recourſe to Vaillant. He ſays it is about the ſize of a turkey as to length, but not ſo thick, being of a more ſlender make: it is thirty-two inches in length from the top of the head to the tip of the tail; the tail itſelf is more than a foot long, of which the wings cover about one third. The bill is near a foot long from the hind part of the helmet to the tip of the beak; the mandibles are nine inches long, and four thick, or, including the height of the helmet, ſix inches; the helmet is ſix inches long; two thick, or high, and four broad. The mandibles and helmet are in general of the colour of yellow ochre, but the mandibles at their origin are black, correſponding to the head, neck, and the greateſt part of the plumage; there is a little red at the tip of the bill, which Vaillant ſuppoſes to extend farther in the living bird; for he obſerves, that the red bills and feet of birds in general turn yellow after they have been ſome time dead: there is a black ſtripe round the back part of the helmet. The helmet is concave, but it is ſmooth, without thoſe deep grooves which in ſome other ſpecies divide it through its whole length; nor does it riſe into a round lump behind, but is flat, and covered with ſkin only; indeed the production of the helmet into two horns in front is quite a ſufficient diſtinc-

tion; but, as theſe horns might be broken off by accident, we will juſt add, that the ridge of the beak is hollowed out for about three inches; and there are long, black, ſtiff, ſhining, eye-laſhes, on the upper eyelid. The noſtrils are clogged with hairs, which grow in a direction towards the helmet. The feathers at the top of the head are long and looſe; they fall back like a flatted tuft; theſe feathers and thoſe of the wings are of a more gloſſy black than the reſt. The ſecondary wings have a large white ſpot in the middle; the reſt being entirely black, ſo that a large white patch appears in the middle of each wing when folded up; the tail is a little rounded, and is ſpotted in the ſame manner. The feet are very ſtrong; the nails are browniſh black; the legs covered with large ſcales of a reddiſh-brown colour. Briſſon, after Willughby and Petiver, mark the legs and feet as green; Vaillant ſays this might poſſibly be in the living bird, thoſe parts being ſo ſubject to change colour in drying; but he is decidedly of opinion, that they miſtook in ſaying that there was one white feather on each ſide of the tail, while the reſt are entirely black; there is no bird in nature that exhibits ſuch an appearance. The breaſt, ſides, thighs, under wing and tail coverts, are white, clouded with yellow on the lower parts. This ſpecies is found at Borneo, as well as the Philippines, and varies in the length of its horns.—Buceros bicornis, *Linn.* and *Gmel.* Calao bicorne, *Vaillant, Hiſt. Nat. des Oiſeaux d'Amerique et des Indes*, N° 7, 8.

The variety β is deſcribed by Vaillant as a diſtinct ſpecies. It meaſures ten inches from the back of the helmet to the point of the mandibles, which are themſelves ſeven inches in length. The helmet is rounded at the ſides, riſing into the ſhape of a ſhell behind, and then is hollowed out into a gentle ſlope forwards as far as the middle of the upper mandible, whoſe ridge is hollowed out for about two inches. The

concave

concave part of the helmet riſes at the ſides, leaving a deep furrow in the middle which divides it in half, and conſequently anſwers exactly to the furrow in the upper mandible. The helmet is open in front, almoſt entirely hollow, and very thin and light, as in moſt of the ſpecies. The mandibles are regularly ſerrated. The upper mandible is red at the end, which grows fainter by degrees till it comes to a yellow; and yellow is the colour of the helmet alſo. The lower mandible is yellow at the end, which becomes very faint indeed till near the baſe, when a large black patch appears, and runs back to meet the feathers which ariſe from the throat, and are of the ſame colour; the feathers on the cheeks, round the eyes, and almoſt to the top of the head, are black alſo. The hind-head and great part of the neck are fawn-colour; the feathers of the occiput are long and thin, forming a kind of tuft which lies down, but which the bird no doubt has the faculty of raiſing. The remainder of the neck, the breaſt, ſides, mantle, ſcapularies, back, tail-coverts, and all the wing-quills, are entirely black. The feathers of the belly, thighs, and under tail-coverts, are thin and ſilky, of a white colour ſhaded with light brown; the tail is of the ſame colour, and rounded at the tip. The ſcales on the feet and legs are very large, and black, as are the nails. This is from Batavia.

There is another variety of this, figured by Vaillant, in which the feathers of the thighs and lower belly, as well as the under tail-coverts and the tail itſelf, were entirely black. Whether this was a variation occaſioned by ſex or age, or any other circumſtance, he does not determine.—B. bicornis, β, *Gmel.* Calao, vel cayao, *Camel in Phil. Tranſ.* xxiii. Calao à caſque concave, *Vaillant's Birds of Amer. and Ind.* N° 3-5.

The *Flat-helmeted Hornbill.*—This hornbill Vaillant at firſt deſcribed and figured as the young of the preceding

ceding ſpecies; but, having afterwards procured a head of the full ſize which he ſuppoſed to belong to the ſame bird, he now believes it may be a diſtinct ſpecies. In the account of the bird, as here combined, the deſcription of the body muſt ſtill be taken as relating to the young bird, and the head to the adult.

The bill is entirely of a vermilion red, and ſix inches long; the mandibles curved, with a few indentions on their edges, and ending in a point; the upper mandible is two inches thick, including the helmet, which riſes half an inch, and covers about half the mandible; it lies alſo about two inches upon the forehead. This helmet is entirely flat at top; ſo that, reverſing the head, it would ſtand firmly, the helmet forming a baſe of nearly an oval form, five inches long and two thick, like a box-iron. The upper mandible is but an inch thick at its baſe. The noſtrils, which are round, and covered with long black hairs, lie at the back junction of the helmet with the bill, near the eyes, which are ſurrounded with long black eye-laſhes; ſtill backwarder there are ſome long black hairs as ſtiff as briſtles at the poſterior junction of the helmet to the head, at which end the helmet turns up a little. The head is ſmall compared with the ſize of the beak; it was given to Vaillant by M. Fayal, of the cabinet of natural hiſtory at Verſailles.

In the young bird, from which the remainder of the account is taken, only the tail and wing quills were completely formed, all the reſt conſiſting of a thick down like the firſt plumage of moſt birds. The mandibles were of the ſubſtance of fine horn, thin and flexible, and the helmet is extremely ſoft; from all which, it muſt be evident, that this was a young bird, and not an adult ſpecies. The form of the helmet, though different from what has been deſcribed in the adult, began already to ſhow the ſhape it was hereafter

after to take had the bird been ſuffered to live: the ſwelling at the hinder part was already apparent, the ſides had begun to riſe, and the upper part, which was to open and form a hollow, was covered with a very thin ſkin. The throat was black, but that colour had not yet covered the cheeks and quite round the eyes. The head, neck, and breaſt, were red; beneath the black feathers of the throat appeared a white collar. The under parts of the body were black mingled with rufous; the wing and tail-quills white ſtreaked with fawn-colour; the wing-coverts and back grey with ſlight tinges of red; the bill browniſh; the legs and feet red.—Calao à caſque concave, var. *Vaillant's Birds of America and India*, N° 6. Calao à caſque plat, *Vaillant's Birds of Africa*, N° 240.

The Pied Hornbill.—This ſpecies has been well deſcribed by Buffon, (from which our account, vol. iv. p. 305, is taken,) as Vaillant acknowledges. But he has added ſome things to its hiſtory of which it behoves us to take notice, chiefly relating to the changes it undergoes. He objects to the name of *Malabaricus*, by Gmelin copied from Buffon, becauſe the bird is found at Ceylon, along the whole Coromandel coaſt, and probably through a great part of India, and even at the Moluccas. Names of countries are bad ſpecific deſignations, ſince the ſame bird is ſometimes common to many parts of the globe; thus we may ſee how abſurd it is to find a cuckow which was killed in China labelled in a cabinet "the Cape cuckow." The pied hornbill is very plentiful in the iſland of Ceylon, where the inhabitants often bring them up tame, and they ſerve the purpoſe of cats by clearing the houſes of rats and mice. This has the largeſt bill, in proportion to the ſize of the bird, of any of the ſpecies. Vaillant has given four plates of this ſpecies only.

The female differs not from the male in colours; ſhe

ſhe is ſomewhat ſmaller, her helmet not ſo high, and its point does not come ſo forward. Theſe birds frequent foreſts of lofty trees, perching on the largeſt, but on a withered branch in preference. They make their neſt in the worm-eaten trunk, laying four eggs of a dirty white colour. The young are hatched quite naked; and for ſome days the helmet is no more than a little creſt riſing only three or four lines from the baſe of the upper mandible; but, as the body by degrees is covered with reddiſh-grey down, it ſpreads and increaſes every day, and in 15 or 20 days it gives a faint idea of what it is hereafter to become; but even yet it is difficult to determine the ſpecies from the helmet alone; the ſpecies cannot be decided with certainty till the age of three months, at which time the young have taken flight; at this time the helmet is grooved in its whole length, and the large ſpot has taken its place; but ſtill the ſtraight-forward point or horn is not protruded; this happens in the laſt or perfect ſtage of growth, and it does not attain its full length till the age of two years, at which time it comes forward perhaps as far as the point of the bill, though it often gets broken and worn by the bird's uſing it, ſays Vaillant, in wounding the bark of trees to get at the inſects, cryſalids, and any other vermin which may be concealed.

Vaillant concludes his account of this ſpecies by obſerving, that the Malabar hornbill, deſcribed by Sonnerat in his Voyage to India, (and which that writer ſays differs very little from Buffon's,) agrees neither with Buffon, nor with the bird itſelf, which Sonnerat brought over, and which is now in the muſeum of natural hiſtory at Paris; and his figure is ſtill more incorrect than his deſcription. It is neceſſary to ſay thus much, leſt thoſe who conſult that work for inſtruction in ornithology ſhould be woefully miſled; for all his accounts of birds are equally erroneous.—Buceros Malabaricus, *Gmel.*—Calao unicorne, *Vaillant's Birds of Amer, and Ind.* N° 9-12.

The

The White-beaked Hornbill.—This Vaillant regards as an entirely new ſpecies. It was killed at Chandernagore, whence he received it. It was only twenty inches long, from the top of the head to the tip of the tail, and the tail alone occupied half this length. The bill is three inches and three lines long; and the mandibles taken together when cloſed are eighteen lines thick; they are nearly equal, irregularly ſerrated on their edges, and blunt at the tips. The helmet ſpreads over about two-thirds of the bill, and reaches over the forehead, to which it adheres; it is rounded off and thin in the front, but ſwells and wrinkles above and at the ſides, riſing higheſt in the middle, and terminating backwards in a large blunt point, black underneath and at the edge; there is a large black ſpot alſo on the front of the helmet, which ſpreads upon the upper mandible; and the baſe of which is marked with an irregular black bar two lines thick; the baſe of the lower mandible has a much broader band, which comes forward to a point under the bill. The cutting-edges of the mandible are black towards their origin; the ſame colour pervades the inſide of the mouth and of the mandibles. Except the black ſpots we have mentioned, both bill and helmet are as white as ivory.

From the above deſcription it will appear, that this might be eaſily miſtaken for a variety of the preceding. The plumage is nearly ſimilar; but the ſpecific difference lies in the helmet, which in the preceding is flatted and furrowed on the ſides, and covered with ſkin behind and underneath; but in this ſpecies the helmet is even, and ſwelled out, reaching in the middle the whole breadth of the mandibles, and terminates at the back part in a corneous ſubſtance like the reſt of the helmet, or rather harder, ſince the other parts yield under the fingers. The feathers on the occiput are long and narrow, with diſtinct or diſunited ſtems, forming a tuft which hangs down be-

hind; this is black, as indeed is the greater part of the plumage; and very gloſſy on the wings and tail, taking a greeniſh ſhade in certain poſitions. There is a large ſpot of white at the end of the wing-quills, and thoſe of the tail except the middle ones; the breaſt, belly, thighs, and under part of the tail, are covered with ſilky feathers of a perfect whiteneſs. The ſcales on the legs and feet are black, as are the nails, which are flatted at the ſides, raiſed above, and grooved beneath. Round the eyes and the baſe of the lower mandible the ſkin is naked, and in the dried ſpecimen appears browniſh. The upper eyelids are furniſhed with eyelaſhes; and the noſtrils with hairs which turn upwards on the helmet.—Buceros albicornis, *Ency. Lond.* Calao à bec blanc, *Vaillant*, N° 14.

The Violet Hornbill.—This is in ſize intermediate between the pied hornbill and the white-beaked. It bears ſome reſemblance to each, but moſt to the former, on account of its helmet being ſimilarly flatted at the ſides; but it differs in the bright colours of the bill, and the rich ſhades of green, purple, and violet, which appear on the plumage when viewed in certain lights, for in the ſhade all theſe fine tints diſappear, and only a greeniſh black is viſible on all thoſe parts, viz. the head, the neck behind and before, the mantle, ſcapularies, back, rump, wings and wing-coverts, the four middle feathers of the tail, and its upper coverts; the three outer feathers on each ſide of the tail, and the ends of the primary wing-quills, are an elegant white. The breaſt, belly, ſides, under tail-coverts, and thighs, are covered with white ſilky feathers which hang down over the legs; the under wing-coverts are partly black and white. The bill is near five inches long, and ſickle-ſhaped; it is two inches thick, or high, at the baſe, and ends blunt; the mandibles are of equal length, furrowed on the edges. On the eyelids is a row of black briſtles

briſtles or eyelaſhes, curved and turning upwards The helmet riſes two inches above the bill, and extends ſomewhat more than half its length, forming an arch of about 45° of a circle; it is flat on the ſides, and marked with two very perceptible but not deep furrows; it is cut off perpendicularly in front; the hind part is flat, and covered below with a black ſkin; a large patch of black appears towards the front; the reſt of the helmet and bill is bright yellow and red; towards the baſe of the lower mandible are two tranſverſe black bars parallel to each other. The eyes are large, lively, and of a brown colour; the ſpace round them is bare of feathers, and black. The nails are black; the feet and legs covered with large brown ſcales. This ſpecies inhabits Ceylon and all the Coromandel coaſt; when tamed, it ſhows much attachment for its feeder; it will eat meat either raw or dreſſed, and boiled pulſe or roots; mice and rats it will ſeize very nimbly, and ſwallows them whole, having firſt bruiſed them with its bill.—Buceros violaccus, *Ency. Lond.* Calao violet, *Vaillant's Birds of America and India*, N° 19.

The RHINOCEROS HORNBILL.—This has been deſcribed and figured at vol. iv. p. 300. Yet we cannot omit the remarks of Vaillant, who deſcribes it from a living bird which he ſaw at the Cape on-board a Daniſh Indiaman from Batavia. It is one of the largeſt ſpecies, and inhabits the iſland of Java. The body is about the ſize of a young turkey-hen, but longer, being three feet four inches from the head to the tip of the tail. The bill was more than a foot long, and near ſix inches in its thickeſt part, that is, including the height of the helmet, which is ſhaped like a ſecond bill reverſed upon the firſt; ſo that it is called *double-bill* by the Dutch at Batavia; and alſo *rhinoceros-bird*, becauſe the helmet turns up at the tip like the horn upon the ſnout of a rhinoceros. This enormous beak might ſeem at firſt ſight to be

intended as a formidable weapon of defence or offence; but Vaillant declares that he often put his finger into its mouth, and, though the bird ſeemed to pinch as hard as it could, it was not capable of hurting him in the leaſt. We have remarked before that the bill and helmet were very light in proportion to their ſize. Vaillant weighed the entire diſſected head of one of the largeſt kinds, and found it to weigh only four ounces, while the head of a raven diſſected in the ſame manner weighed more than an ounce, though the bird he ſays was not a twentieth part the ſize; ſo that he concludes the bill of this bird to conſiſt of a ſubſtance more porous and light than that of any bird whatever.

To return. The bird we were ſpeaking of was very timid; it ran off into a corner at the ſight of man or any animal. Its manners were ſlovenly; its aſpect extremely ſtupid. It did not walk, but jumped with both feet together. The only moment in which it ſeemed to acquire any confidence was when food was brought to it: it ran to meet the man, ſtretching out its wings and opening its wide beak; then it uttered ſome notes of joy, but very weak for a bird of that ſize: it was commonly fed with biſcuit ſoaked in water, and ſometimes meat, raw or boiled; it would eat rice, boiled peaſe and French beans, and even bacon: indeed, being very greedy, they may be brought to eat almoſt any thing. Vaillant carried him ſome ſmall birds he had ſhot; the bird ſwallowed them one after the other, feathers and all, having firſt mumbled them a good while in his mouth, not having ſtrength probably to break their bones at once. The ſailors on-board the ſhip which brought it from Java ſaid that it hunted the rats and mice, but never had been nimble enough to catch one; that it ſwallowed whole all that were given it. It would not eat berries or fruits, though it would take them in its bill when preſented, but preſently reject them: it ſeems therefore

fore certain than none of theſe birds are frugivorous, at leaſt in their natural ſtate.

The moſt agreeable colours poſſeſſed by this bird are upon the bill. The helmet is of a beautiful red on its upper ſurface, and ſaffron-colour at the tip, which bending a little back, ends in a rounded blunt point: this helmet is divided through its whole length by a black line, which gives it the appearance of a bill cloſed and reverſed; a broad black ſtripe joins it to the head. The bill itſelf, which is bent like a ſcythe, is black at its origin, afterwards ſaffron-colour, but reddiſh near the head. The mandibles were much cracked and notched by accidents, but it was eaſy to ſee, that naturally they were regularly ſerrated, as in moſt of the genus. The eyes were large and blackiſh, with long flat eyelaſhes. The feet and legs covered with large brown ſcales; the nails were much flatted at the ſides, and all their points broken or worn away by ſcratching; they were of a blacker colour than the ſcales. The colour of the plumage in general has nothing remarkable in it, being quite black, with a bluiſh gloſs in thoſe parts expoſed directly to the light. The large wing-quills are a ſhining black. The tail white at the end, and ſomewhat rounded, the lateral being ſhorter than the mid quills. The wings when folded up reach ſome inches beyond the upper tail-coverts.

This account agrees ſo well with that given by Bontius, that there can be no doubt the ſpecies was the ſame; only he does not mention the white ſpots at the termination of the tail-feathers, which muſt be very remarkable in a bird otherwiſe entirely black. This ſpecies is found in moſt parts of India; and probably is not ſcarce, for the beak is to be ſeen in moſt collections of natural hiſtory; but the bird itſelf was not perhaps reckoned handſome enough to be preſerved entire; at leaſt we know of no cabinet in Europe that poſſeſſes one.—Buceros rhinoceros, *Linn.* and *Gmel.* Calao rhinoceros, *Vaillant,* N°1, 2.

The

The HORNBILL WITH a SEMILUNAR HELMET. —This is a large ſpecies, known in the Moluccas, and diſtinguiſhed by its helmet, which extends over at leaſt two-thirds of the upper mandible: it riſes in a rounded form near the forehead, comes forward tapering towards the point of the bill, and then turns upwards; ſo that it exhibits a half-moon laid lengthwiſe upon the beak, which is near a foot long, and very ſtrong; the mandibles are much curved like a ſcythe, and are thick and broad in proportion to the ſize of the helmet, which is larger than that of the rhinoceros hornbill, though in other reſpects they are nearly of the ſame ſize and proportion, only the preſent ſpecies has rather a longer tail.

Black is the prevailing colour in this and in all the large ſpecies; but, according to the different lights it is viewed in, it takes a ſhade of brown or blue. The plumage of the lower belly, under tail-coverts, and thighs, is dirty white, long, thin, and of a ſilky nature; but on all the other parts of the body, the feathers are rough and ſtiff. The tail is longer than the body, ſomewhat rounded; from its origin it is of a dirty white about one third of its length, the ſecond third is black, and the remainder the ſame colour as the firſt part. The feathers of the occiput are long and thin, and form a tuft when erected, but have no ſuch appearance in general. The neck is long and ſlender, and the body lank, like moſt of the hornbills. The bill and helmet are of a dull yellow, with a black ſtripe terminating behind, and a line of black running along the baſe. The upper eyelid is furniſhed with black eyelaſhes; the noſtrils are beſet with ſtiff hairs ſhining like horſehair. The feet are very ſtrong, covered with large dark ſcales, and armed with claws flatted at the ſides and not very ſharp at the points.

The ſpecimen above deſcribed was in the cabinet of M. Temminck at Amſterdam, and was ſent to him from Java; but, whether killed in that place or not

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is not known; or whether it came originally from one of the Moluccas, as at Borneo this ſpecies is ſaid to be very plenty. They frequent only the great woods, and are very wild and ſavage: they unite in flocks to devour carcaſes; which is agreeable to what ancient naturaliſts report of the large hornbills in general, though they confound the different ſpecies under the ſame name. Certain it is, that theſe birds, being very ſimilar in plumage, and the helmet varying at different ages, it is difficult to diſcriminate correctly, unleſs we could watch them in all the ſtages of life, and obſerve the natural habits of each ſpecies.

There is a variety in the collection of M. Sonneberg at Leyden, with a little red in different parts of the bill; but, whether the former had loſt its natural colour, or that this is a variety ariſing from age or ſex, remains to be known, together with many deſirable particulars relative to the habits and manners of theſe birds.—Buceros ſemilunaris, *Ency. Lond.* Calao à caſque en croiſſant, *Vaillant's Birds of America and India*, N° 13.

The ROUND-HELMETED HORNBILL.—Vaillant ſays, that the bird which bears this name certainly cannot belong to the genus of hornbills, though all naturaliſts have agreed in placing it here; ſee vol. iv. p. 309. The head is the only part known, which is figured in Buffon. Vaillant examined carefully ſeveral of theſe heads which he met with in different cabinets, eſpecially two in the Paris muſeum, one of which had ſeveral of its feathers remaining. Having procured another head, they ſawed it through every part; and were convinced, by the texture of the bones, their hardneſs and ſolidity, as well as by the weight of the helmet, that the birds to whom theſe heads belonged could not be of the genus *buceros*. The great lump or wen on the forehead, was no doubt originally miſtaken for the helmet ſo common to the hornbills; but this error could hardly have ariſen, had

had the firſt examiner of this head previouſly felt the weight of it in his hand; he would have been preſently convinced, that it could not belong to a hornbill. The difference is ſo great, that, though the bill and head of this bird are not one-third the ſize of the entire head of rhinoceros hornbill, they are however four times the weight; which will not appear ſurpriſing, when it is recollected, what has been before obſerved, that the helmet of the hornbills is almoſt entirely hollow; and that the bones of the head and of the mandibles are ſo exceedingly porous as to reduce their weight to almoſt nothing. In the preſent ſubject, however, the helmet is ſolid, and of ſuch a cloſe and compact texture, as to reſemble ivory; the mandibles are equally ſolid, and the bones of the head are of an extraordinary hardneſs; ſo that theſe parts totally differ in texture from the head, mandibles, and helmet, of the hornbills. The ſhape of the head is different alſo: in the hornbills it is very ſmall compared with the ſize of the bill; in this bird it is on the contrary very large: the mandibles are curved in all the hornbills; in this they are ſtraight. Vaillant has no doubt but it belongs to the claſs of aquatic birds; this appears from the nature of the feathers he found upon one of the heads which he examined; their barbs were ſmooth and cloſe like all the diving tribe. From the weight of the head, he ſuppoſes that this bird has hardly the faculty of flying, unleſs nature has given it extraordinary large wings; in which caſe it muſt be the moſt formidable animal that ſoars in the air. It is indeed very ſurpriſing, that, although the head has been known ſo long, no traveller ſhould ever have been able to deſcribe the entire bird, eſpecially as the *heads* are by no means ſcarce. Can the ſpecies be extinct? It is more probable that it inhabits ſome country rarely viſited by Europeans.—*Vaillant's Amer. and Indian Birds*, vol. i. p. 59. Buceros galeatus, *Gmel.* Semenda, *Aldrov.* Calao à caſque

caſque rond, *Buff.* Round-helmeted hornbill, *Edwards.*

The PANAYAN HORNBILL.—Vaillant's deſcription of this ſpecies differs but little from that we have already given in our fourth volume, p. 303. But he finds great fault with the figures both of Buffon and Sonnerat; and gives three plates, of the male, the female, and of a very young one, with its firſt plumage; which laſt he ſays is abſolutely the bird given by Buffon for the Manilla hornbill, B. Manillenſis. This young one deſcribed by Vaillant was probably a female; it had the triangular ſpot under the eye, which was as yet of a brown colour, not having attained the dark green or black of the adult. The bill, and helmet (not riſing more than a line and a half above the upper mandible), were light brown; the indentions in the bill were not yet apparent. The head, neck, and all the under part of the plumage, were light grey, and as cottony as the fineſt down of young chickens; the back, ſcapularies, and wings; were dark brown intermixed with ruſous; tail the ſame, with a broad tranſverſe patch of ruſt-colour at the end, and another higher up.—Buceros Panayenſis, *Gmel.* Calao à bec ciſelé, *Vaillant*, N° 16, 17, 18. Calao à bec ciſelé de l'Iſle de Panay, *Sonnerat.* Calao de l'Iſle de Panay, *Buff.*

The STRIPED HORNBILL.—Specific character, alternate, ſtripes of black and white along the tail; helmet ſmall. This ſpecies is not larger than a magpie. The helmet extends about two-thirds the length of the upper mandible, not riſing more than two or three lines at moſt. The mandibles are thick, arched, and ſerrated on their edges. The end of the bill, namely, beyond the helmet, is of a red-brown, growing fainter on the edges of each mandible, and marking the joining of the helmet with the upper mandible, which alſo is interſected through its whole length by a line of the ſame colour which paſſes

through the noſtrils; the reſt of the bill and helmet are pale yellow, with ſome ſlight furrows or indentions: the tail is as long as the body, and ſlightly tapered; the wings are much ſhorter. In other particulars it differs little from the reſt of the genus. The upper ſurface is black, in ſome lights with an appearance of brown. The four middle feathers of the tail are of that colour; the two next and the laſt on each ſide are white, thus forming the longitudinal ſtripes noted in the ſpecific character, which we think Vaillant rather improperly calls *bands*, that word being generally applied to tranſverſe ſtripes or bars. The under parts are white, with the exception of a few ſpots and ſhades of black on the hind part of the thighs and on the flanks. The feet and eyes are black. This bird was ſent from the coaſt of Angola; but Vaillant never met with it in the part of Africa he viſited; this therefore is not deſcribed from the living animal.—Buceros longibandus, *Ency. Lond.* Calao longibandes, *Vaillant's African Birds*, N° 233.

The Crowned Hornbill.—Helmet as in the preceding, that and the bill entirely red; a white ſtripe partly encircles the head, within which the feathers are long. This new ſpecies was diſcovered by Vaillant in the ſouth of Africa. He calls it *crowned*, becauſe a white line or ſtripe runs from the upper part of the eye, over the ears, and goes round the hind head near the nape of the neck; and within this line the feathers on the hind head are long enough to form a kind of tuft or crown, which makes the deſignation very proper. The tail is as long as the body, and tapered more than the preceding. The wings reach very little beyond the upper tail-coverts. The bill is ſerrated. The whole bird is ſomewhat leſs than the preceding; and the plumage moſtly black, like it; the tail feathers are black, but white at the tips: all the under parts, from the breaſt to the under tail-coverts, are white, the throat and breaſt being black

black like nearly all the upper ſurface. The bill is red; feet browniſh black; eyes dun-colour. The adult female differs from the male only in wanting the white coronary circle. In the young birds, that which is to become black is brown, and the whole front of their neck and breaſt is dirty white like the reſt of the under parts.

This ſpecies frequents the whole coaſt to the eaſt of the ſouth of Africa, from the Little and Great Salt Rivers (Klyn Brac and Groote Brac) to the country of the Caffres. It frequents great foreſts, perching on the largeſt trees, but preferring a dead branch. They are gregarious, and feed on inſects, and on carrion, which they ſeek in company with the crows and vultures. This bird has two cries: one is, *cree-cree cree, kee-kee-kee,* which it repeats inceſſantly as it flies, exactly like our keſtrel; the other is a grave ſound, *cou,* which it utters often on the perch. They neſtle in holes of trees, and the female lays four white eggs.—Buceros coronatus, *Ency. Lond.* Calao couronné, *Vaillant,* N° 234, 5.

The FESTOON-HELMETED HORNBILL.—Specific character, helmet ſmall, bill large. The bill of this bird is five inches long and two thick; total length of the body, including neck and tail, about thirty inches. The mandibles are nearly equal in length, arched, but not ſerrated on the edges; they are yellowiſh white, but light brown at the baſe. The helmet riſes five or ſix lines only above the bill, forming a lengthened protuberance with rounded facets, and reaching about one third the length of the bill, faſtened behind to the forehead, and cut tranſverſely into ſeveral feſtoons or rounded pieces, the prominent parts white, the hollows brown. The eyes are ſurrounded with a naked wrinkled ſkin, which runs round the mandibles, and entirely covers the throat; this was painted blue in the preſerved birds examined by Vaillant, but he does not preciſely know if that be

the natural colour or not: the feathers on the hind part of the head are long, appearing like a recumbent tuft, but which is probably raiſed at certain times. The legs are thick, ſhort, and covered with broad ſcales of the colour of lead. The toes are very ſtrong, armed with large black claws, which are blunt, and flatted on the ſides. There are long arched eyelaſhes from the upper eye-lid. The wings do not ſtretch beyond the upper tail-coverts. The general colour of the plumage is black with a ſtrong blue gloſs; between the ſhoulders is a ſquare patch of red, like a ſaddle; this is wanting in the female. The under parts have not much of the blue gloſs; they are rather of a brown black; the large wing-feathers are quite black, but the ſtems have a very bright gloſs. The tail is rounded at the tip, the lateral feathers being rather ſhorter than the intermediate ones; it is ruſous white, and almoſt as long as the body, meaſuring from the bottom of the neck to the anus. The female is ſomewhat ſmaller. In the cabinet of M. J. Temminck at Amſterdam; ſent from Batavia; its habits not known. —Buceros criſpatus, *Ency. Lond.* Calao à caſque feſtonné, *Vaillant's Birds of America and India*, N° 20, 21.

The Javan Hornbill.—Helmet ſmall; neck and tail black. This ſpecies is ſomewhat larger than the raven, and is longer on account of the dimenſions of the neck and tail; meaſured in a right line from the forehead to the tip of the tail, it gives an extent of thirty inches. The bill is ſomewhat convex on the upper rim, and ſhaped juſt like that of the raven, only on a larger ſcale; black at the baſe, and ruſous towards the point; four inches and a half long, twenty lines high, and the ſame in breadth; the mandibles are a little ſerrated. The helmet conſiſts of five or ſix knobs, or feſtoons, like the preceding, and by which the age may be known, as one of theſe knobs is produced every year. There are arched

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1. The Javan Hornbill. 2. The Gingala Hornbill?

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laſhes on the upper eyelid. The front and top of the head, and thoſe long feathers which form a pendent creſt, are reddiſh brown, which colour weakens on the ſides till it melts into a faint dun-colour. The throat and cheeks are covered with a naked blue ſkin; the neck is covered with ſmall feathers which are white inclining to rufous; this colour ſtretches to the breaſt in front, but terminates higher up behind. The tail is ſomewhat rounded at the tip, and of the ſame colour with the neck. The mantle, back, rump, wings, breaſt, ſides, and belly, and indeed the generality of the plumage, are black with a greeniſh gloſs. The legs and feet are very ſtrong, covered with large blue ſcales; the nails are dirty white, and ſimilar in form to thoſe of the reſt of the hornbills. The wings are very large; when folded up, they reach nearly to the middle of the tail; a circumſtance not common in this genus. This bird is in the cabinet of M. Temminck at Amſterdam; it came from Batavia, accompanied only by a note, that it was called in that country *joar-vogel*, year-bird; from which it is preſumed, that it is a bird of paſſage in Java, and arrives there about the beginning of the year.—Buceros Javanenſis, *Ency. Lond.* Calao Javan, *Vaillant's Birds of America and India*, N° 22. but a more correct figure is given in his *African Birds*, N° 239. from which is copied the repreſentation on the annexed Plate, fig. 1.

The GINGALA HORNBILL.—Specific character, helmet none, bill black and white. This is alſo a newly-diſcovered ſpecies. It is diſtinguiſhed by a beautiful flowing creſt, which falls down in a tuft behind, ſhading the back of the neck almoſt entirely. No hornbill has a creſt ſo elegant and ſo large, though the bird itſelf is not ſo large as our common magpie. The bill of this ſmall ſpecies is very large and ſtrong in proportion to the ſize of the bird: it is three inches long, and more than half that thickneſs

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at the baſe; the mandibles are much arched, and ſerrated. The noſtrils, almoſt concealed among the ſtiff hairs, are near the forehead. The eyes are furniſhed with a row of convex laſhes. The wings when ſhut in reach only to the ſetting-on of the tail. Each mandible is half black and half white in longitudinal ſtripes. The top of the head, the creſt, all the back of the neck, as well as the mantle and the feathers of the upper tail-coverts, are dark brown ſhaded with grey and bluiſh. The wings are bluiſh grey; each feather of the upper wing-coverts is tipped with a narrow line of black, which makes an agreeable appearance of ſcales, though upon the whole the colours of this bird are not very ſtriking. The under wing-coverts are white, as are ſome of the inner barbs of the great feathers. The face, throat, and front of the neck as far as the breaſt, are white ſlightly ſhaded with grey: the ſame colour, growing darker by degrees, pervades all the reſt of the under parts of the body, that is to ſay, the belly, the flanks, and the feathers of the thighs. The under coverts of the tail are narrow-brown, and a little of the ſame appears on the lower part of the thighs. The tail, which is longer than the body, is tapered, and all the feathers are pointed: the longeſt, which are thoſe in the middle, are entirely of the ſame colour as the wings; the next, which diminiſh inſenſibly in length, are of a ſimilar colour, but tipped with white; and the remainder, or moſt lateral, are white along their outer barbs. Thoſe parts of the tail which are above of a bluiſh grey are beneath of a faint black. The eyelaſhes are black; the nails, and the broad ſcales of the feet, brown. This ſpecies inhabits Ceylon.—Buceros Gingala, *Ency. Lond.* Calao gingala, *Vaillant*, N° 23. See the annexed Plate, fig. 2.

The Red-beaked Hornbill. — Specific character, helmet none, bill red.—This ſpecies, ſays Vaillant, is the *toc* of Buffon, which he conſiders as the

the young of the black-billed hornbill, vol. iv. p. 301. and accordingly that ſpecies and the *tock* have always been confounded; but, though the black-billed hornbill, when young, has really a red bill, and is therefore improperly named, yet Vaillant conſiders the preſent as entirely diſtinct, having many other differences beſides the colour of the bill. It has been deſcribed by Briſſon under its proper name.

The red-billed hornbill inhabits near the line; it is very frequent about Senegal, but never paſſes the tropics; at leaſt Vaillant affirms that he never met with it in any part of ſouthern Africa which he viſited. It is twenty inches in length, including the bill, which is three and a half long, and one and a half high. The tail, which is taper, is as long as the body; and the wings, when at reſt, reach not far below the origin of the tail. The bill is leſs arched, and leſs ſerrated, than that of the black-billed hornbill; which will be ſufficient to diſtinguiſh the two ſpecies. The head is covered with a hood of thin feathers falling back over the neck; this, and all the back of the neck, are variegated white and black, but white predominates; the mantle and wing-coverts are deeper black, but much variegated with very pure white, which prevails alſo along the edges of the outer wing-quills, while the primary wing-quills are black on the outer ſurface, but white underneath. The tail is blackiſh-grey, the outer feathers edged and tipped with white. The whole of the under ſurface, from throat to tail, is white. The feet are brown; the bill bright red. In the young bird, the bill is orange-colour, without any ſerrature; and the parts which are afterwards to become white are of a rufous grey. It was a young bird, probably, from which Briſſon took his deſcription.—Buceros naſutus, *β*, *Linn.* and *Gmel.* Hydrocorax Senegalenſis erythrochynchos, *Briſſ.* Calao à bec rouge de Senegal, *Buff.* Calao toc, *Vaillant's African Birds*, N° 238.

The

at the baſe; the mandibles are much arched, and ſerrated. The noſtrils, almoſt concealed among the ſtiff hairs, are near the forehead. The eyes are furniſhed with a row of convex laſhes. The wings when ſhut in reach only to the ſetting-on of the tail. Each mandible is half black and half white in longitudinal ſtripes. The top of the head, the creſt, all the back of the neck, as well as the mantle and the feathers of the upper tail-coverts, are dark brown ſhaded with grey and bluiſh. The wings are bluiſh grey; each feather of the upper wing-coverts is tipped with a narrow line of black, which makes an agreeable appearance of ſcales, though upon the whole the colours of this bird are not very ſtriking. The under wing-coverts are white, as are ſome of the inner barbs of the great feathers. The face, throat, and front of the neck as far as the breaſt, are white ſlightly ſhaded with grey: the ſame colour, growing darker by degrees, pervades all the reſt of the under parts of the body, that is to ſay, the belly, the flanks, and the feathers of the thighs. The under coverts of the tail are narrow-brown, and a little of the ſame appears on the lower part of the thighs. The tail, which is longer than the body, is tapered, and all the feathers are pointed: the longeſt, which are thoſe in the middle, are entirely of the ſame colour as the wings; the next, which diminiſh inſenſibly in length, are of a ſimilar colour, but tipped with white; and the remainder, or moſt lateral, are white along their outer barbs. Thoſe parts of the tail which are above of a bluiſh grey are beneath of a faint black. The eyelaſhes are black; the nails, and the broad ſcales of the feet, brown. This ſpecies inhabits Ceylon.—Buceros Gingala, *Ency. Lond.* Calao gingala, *Vaillant*, N° 23. See the annexed Plate, fig. 2.

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The

The WHITE HORNBILL.—About the ſize of a gooſe, wholly ſnow white, except the bill and legs, which are black; the beak curved, and of great length and thickneſs. This bird was caught between the iſlands of Tinian and Pulo-timoen. It was firſt deſcribed in Hawkeſworth's Voyages; it was kept alive four months on-board, and fed on biſcuit, after which it died. The annexed Plate contains a very correct repreſentation of this ſpecies; together with a figure of the head of the Indian hornbill, which ſee deſcribed at vol. iv. p. 304.—Buceros albus, *Gmel.* White toucan, *Hawkeſworth.* White hornbill, *Latham.*

The WREATHED HORNBILL. — Protuberance rounded above; ſeven or eight-lobed; body black; tail-feathers white. Inhabits New Guinea and Ceylon: ſize of a crow. Bill bent, five to ſix inches long; protuberance an inch high, mandibles not ſerrate; outer tail-feathers black tipt with white, half black; crown black; legs bluiſh. Buceros obſcurus, *Gmel.* Indian raven, *Will.* Wreathed hornbill, *Lath.*

The GINGI HORNBILL.—This handſome ſpecies is figured by Sonnerat in the ſecond vol. of his Voyage to the Indies. He calls it *Calao de Gingi*, though it is probably found in other parts of India; but he gives no deſcription of it, though he viſited the country where he ſays it is found. Vaillant deſcribes it as follows: It is two feet long from the tip of the bill to the extremity of the tail, and the tail is nearly ten inches long. The bill is three inches and a half in length meaſured as ſtraight as may be; it is bent like a ſickle; and the helmet comes forward in the ſame manner, ending in a point: it is eight or nine lines high, flat at the ſides, attached to the upper mandible about one third of its length, the detached part then coming forward rather more than half the length of the mandible. The bill is white at the tip, and along the upper and under ſurface; but black at its origin, and along the middle and edge of both mandibles, joining to the helmet,

BUCEROS.

J. Pass sc.

The alba or White Hornbill; and the Head of the Indian Hornbill.

London. Published as the Act directs. Feb.y 2.d 1808. by J. Wilkes.

helmet, which is alſo black. There is a very viſible tuft on the head, not noticed by Sonnerat, and omitted in his deſign, which is incorrect alſo in other reſpects.

The upper ſurface of the plumage, that is, the head, neck, back, and wings, are of a light cinereous grey, darker however on the large feathers of the wings and on the top of the head. The breaſt, belly, thighs, and under tail-coverts, are pure white; there is alſo ſome white on the outer barbs of the laſt wing-quills, but their inner barbs are blackiſh. The tail is in general of the ſame colour with the wings, but the two mid-quills are black at the end, and about two inches longer than the reſt; all the lateral feathers are tipped with white, and immediately above the white part there is a broad bar of black; the lateral quills diminiſh in length by very ſmall degrees to the outmoſt. The mandibles are ſerrated; the feet and nails are brownish. All that Sonnerat informs us of this bird, is, that the Indians call it the *double-billed bird*.—Buceros Ginginanus, *Turton*. Calao de Gingi, *Sonn.* and *Vaillant's Birds of America and India*, N° 15.

The Eastern Hornbill.—Bill convex, keeled above, protuberant at the baſe; orbits naked, wrinkled, cinereous; body blackiſh. Inhabits New Holland; nearly as large as a jay. Noſtrils open near the baſe of the bill.—Buceros orientalis, *Turton*.

The Grey Hornbill.—Protuberance ſloping before, abrupt behind; body grey. This alſo inhabits New Holland. Crown black; bill yellow, with a black ſpot at the baſe; at the corner of each eye a tuft of briſtles, and behind a naked blue ſpot; wing-coverts variegated with black; quill-feathers tipt with white.—Buceros orientalis, *Turton*.

The Green Hornbill.—Protuberance abrupt; body black; wings greeniſh. Bill yellowiſh, a naked whitiſh-blue ſpot at the baſe of the under mandible; outer tail-feathers; baſe of the quill-feathers, and belly, white: legs bluiſh.—Buceros viridis, *Turton*.

The Raven Hornbill.—This ſpecies partakes of the nature of the two genera whoſe name it bears: Vaillant therefore conſiders it as forming a new genus, which ſhould be placed between the two. It reſembles the ravens in the ſhape of the bill, and in that of the feet, the toes of which, inſtead of being partly united, are ſeparated entirely; but it has a ſmall helmet upon the bill about two lines high, between the forehead and noſtrils. The noſtrils are long, and placed about the middle of the bill. The head is covered with a callous fleſh, naked and wrinkled, leaving the auditory holes entirely bare. The tail is truncate, but long; and the wings reach but juſt over the upper coverts of it. The bill is long and arched, and, together with the helmet, of a black colour. The naked ſkin of the head, in the ſpecimen ſeen by Vaillant, was painted blue; but he cannot tell whether that was its natural colour or not, and he deplores the taſte of thoſe who add folly to ignorance by decorating dead birds according to their own fancy when unacquainted with the real colours: ſince, by leaving theſe parts as they find them, a more accurate obſerver might diſcover what the original colour was.

The throat and all the front of the neck are covered with ſmall white feathers, the points of which falling one over the other preſent the appearance of a flaſhed ruff; the ground-colour, or feathers underneath and below theſe, is brown, and grows lighter on the more under parts, and is almoſt grey on the belly, flanks, thighs, and under tail-coverts. The back, ſhoulders, rump, upper coverts and two mid-quills of the tail, are chocolate-colour; the ſmall and great wing-coverts, and the wings themſelves, are of the ſame colour, but ſlightly fringed with bluiſh grey, which is the colour of the lateral quills of the tail, but they are tipped with white. The feet and nails are browniſh. Its country is not known. From the cabinet of M. Raye de Breukelerwaert, at Amſterdam. — Buceros corvus,

corvus, *Ency. Lond.* Corbi calao, *Vaillant's Birds of Amer. and India*, N° 24. It is probably the Buceros hydrocorax of *Gmel.* deſcribed by us under the genus Corvus, vol. iv. p. 327. and the Erkoom of *Bruce.*

CROTOPHAGA, THE ANI.

The VARIEGATED ANI.—Eleven inches long; bill black; plumage on the body variegated with black and red; head, throat, breaſt, middle wing-coverts, and tail, black; under parts tawny red; legs yellowiſh brown.—Crotophaga varia, *Turton.*

The WALKING ANI.—So named from the ſtructure of its feet, which have two toes before and two behind, different from all others of the genus at preſent known. In ſize and plumage it very much reſembles the preceding, and is a native of the Dutch ſettlements in Surinam.—Crotophaga ambulatoria, *Gmel.* Walking ani, *Latham.*

CORVUS, THE CROW, RAVEN, &c.

The GREAT RAVEN of AFRICA.—This African ſpecies ſo much reſembles the common raven, deſcribed at p. 315 of vol. iv. that it is probably only a variety of the ſame ſpecies; for, this bird being generally ſpread all over Europe, it is not ſurpriſing it ſhould be found at the Cape alſo. It was obſerved, indeed, that in Africa the bird was generally larger; the bill ſtronger and more bent; but it agrees in all other particulars, and its habits are the ſame; and we know that the European raven varies n ſize in different places, and has a beak more or leſs arched. This bird is met with moſt commonly in the mountains about the bay of Saldanah; they keep in ſmall flocks, and do not mix with the other ſpecies of the ſame genus. They feed upon carrion, earthworms, ſnails, the land-tortoiſe, and large inſects: they will attack the young gazelles, and ſometimes kill them.

In Europe, this bird ſometimes lives on fruits and grain; but Vaillant aſſures us this is not the caſe with the African one; for, having killed ſeveral in places where much corn was ſown, he never found any appearance of grain in their ſtomachs, but only the remains of the food mentioned before. They haunt the ſame places continually; make their neſt in the rocks; and lay four or five eggs, which are green ſpotted with brown. The coloniſts diſtinguiſh this from the other ſpecies by the name *groote-kraai*, great raven. The colour of this bird is entirely black, which is ſhining on the wings and tail, but not with any reflection of green or purple. The eyes are dark brown; the feet, bill, and nails, a fine black. The female is ſomewhat leſs than the male, and of a browner black.—Corvus magnus, the great raven, *Ency. Lond.* — Grand Corbeau, *Vaillant*, N° 51.

The Collared Raven of Africa.—This ſpecies is one of Vaillant's newly-diſcovered birds of Africa. It reſembles the common raven in the ſhape of its body, feet, and claws, the middle claw being joined to the inner one by a membrane as far as the firſt articulation; alſo in the feathers at the baſe of the bill bending forwards and covering the noſtrils; but it differs in the ſhape of the beak, the length of the wings, and the form of the tail. This bird, which Vaillant calls *corbiveau*, ſeems to occupy the interval between the ravens and vultures. Upon the whole, however, it moſt reſembles the ravens: it approaches the vultures of Africa by the ſize of the wings, which, when folded up, reach three inches beyond the tail; by the duplicature of the tail, and by the ſhape of the bill, which is laterally compreſſed, convex above, much bent and rounded, that is, riſing in proportion as it lengthens in a progreſſive curve: theſe marks are ſufficient to diſtinguiſh this bird from all the ravens hitherto deſcribed. And, if future naturaliſts ſhould diſcover other ſpecies analogous to this, ſo as to form an intermediate genus, the ſpecific

cific character of the bird under conſideration might be the "large white ſpot on the nape of the neck; all the reſt of the plumage being of a gloſſy black, except a white line from each ſide of this ſpot, which encircles the breaſt, forming a kind of necklace or collar." The white line which completes the collar is faint, being formed of but one row of half-white feathers, only the tips of which are viſible. The throat is not ſo deep a black as the reſt of the body; the feathers which cover it are forked, overhanging the ſtem as if the end of the latter had been cut off. The tail is tapering. The feet are black; as is the beak, except at the tip, which is white. The iris of the eye is hazel. This ſpecies is inferior in ſize to the common raven, and may be placed between that and the carrion-crow. It is farther to be obſerved, that the claws of this ſpecies are ſtronger and more hooked than in ravens in general. In this it reſembles the rapacious birds, and its manners exhibit the ſame marks of analogy. Voracious, noiſy, bold, gregarious, and ſordid, like the crows, theſe birds make carrion their principal food, in ſearch of which they fly in numerous and clamorous flocks; their cries are hoarſe and deep, and their manners diſguſting, like moſt birds which feed on carrion. But to theſe habits the collared ravens unite a ſtrong appetite for living prey; they attack and kill lambs and young gazelles, which they devour, beginning with the eyes and tongue. They fly in flocks after the buffalo, the ox, the horſe, and even the rhinoceros and elephant; on the backs of theſe large animals many are often ſeen perched at a time; fatal enemies indeed would they be had they but ſtrength equal to their thirſt for blood; but, as the ſkin of theſe quadrupeds is too thick to be wounded by them, the raven is content with drawing the blood and moiſture from wounds already made, by the wood-lice and gad-flies burrowing in their fleſh. And Vaillant obſerves, that this ſanguinary inſtinct in the raven is really of

ſervice

ſervice to the beaſt, who ſuffers her with pleaſure to draw out with her bill thoſe larvæ which otherwiſe gnaw into his vitals, and cauſe him to waſte away to death, as many of them do.

This bird flies very ſtrong, and hovers at a great height in the air. They make their neſt in October, either in thickets or in large trees; it is very large, hollow, conſtructed in boughs, and lined with ſoft ſubſtances within. The female lays three eggs, which are greeniſh ſpotted with brown. It is not a migratory bird, but remains all the year in the country where it was hatched. Vaillant met with it in all parts of Africa; but more frequently in the country of the Great Namaquois and in Swartland, and ſeldomer as he approached the Cape. The coloniſts call it *ring-hals-kraai*, the collared raven. The female is ſomewhat leſs than the male, has leſs white on the collar, and the black colour is not ſo bright, but rather inclines to brown.—Corvus capiſtrum, the collared raven, *Ency. Lond.* Corbiveau, *Vaillant*, N° 50. See the annexed Plate.

The South-Sea Raven. — Nineteen inches in length; bill remarkably ſtrong at the baſe, much compreſſed at the ſides, and of a black colour; the plumage duſky black; the feathers beneath the chin of a remarkably looſe texture; quills browniſh black; tail eight inches long, and black; legs black. Native of the Friendly Iſles, in the South Seas.—Corvus Auſtralis, *Gmel.* South Sea raven, *Lath.*

The White-chinned Crow.—General plumage ſooty black, except the chin, which is white; baſe of the bill cinereous; wings and tail dark olive. Native of Sweden.—Corvus clericus, *Gmel.* from *Sparrman.* White-chinned crow, *Turton.*

The White-necked Crow.—This ſpecies is very plentiful at the Cape, from the town even to the moſt diſtant ſettlements; and it probably inhabits the greateſt part of Africa. Vaillant ſays it is more numerous than all the other ſpecies, from Falſe-bay to the Great Namaquois

J.Reinold delin.t

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The collared Raven of Africa.

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Namaquois on the one ſide, and to Caffraria on the other. There is not a horde or a habitation belonging to the ſavages, where they are not as it were domeſticated and familiar: they come to the very doors of the ſlaughter-houſes in Cape-town, and unite with the collared raven, juſt deſcribed, in devouring carcaſes or offal. The coloniſts call it *bonte kraai*, the ſpotted or variegated crow, becauſe the plumage is regularly marked with black and white, which are its only colours. The white forms a kind of ſcapulary, or covering for the ſhoulders, extending in front to the lower part of the ſternum or breaſt-bone, only covering the neck behind, for the head is entirely black, as is the throat and the front of the neck. The reſt of the plumage is entirely black; the ſcapularies and wing-quills have a bluiſh gloſs. The tail is rounded, and the wings extend more than three parts of its length: the eyes are hazel-colour; the bill, feet, and nails, black. The female is ſmaller than the male: the black not ſo ſhining, and the white duller, and does not reach ſo far downwards. Theſe birds build their neſts in trees, or the moſt leafy coverts: the eggs are five or ſix in number, of a pale green ſpotted with brown. Like the collared raven, it perches on the backs of the buffalos and other large beaſts, and devours the inſects that torment them. Vaillant ſays he was often indebted to theſe birds for preſerving the lives of his draft-oxen, which muſt otherwiſe have periſhed miſerably; and the Hottentots of the Cape hold theſe birds in great eſteem, for the ſervices they thus render.— Corvus albicollis, *Turton.* Corneille à ſcapulaire blanc, *Vaillant*, N° 53. who affirms this to be the ſame with the Corvus Dauricus, *Gmel.* Corneille du Sénégal, *Buff.* Chineſe black raven, with white neck, *Oſbeck.* Senegal crow, vol. iv. p. 337.

The New-Caledonia Crow. — Length ſixteen inches; bill ſtout and black; irides pale yellow; eye-lids black; general colour of the plumage cine-

reous,

reous, except the tail, which is five inches in length and black; legs black. Native of New Caledonia.—Corvus Caledonicus, *Gmel.* New Caledonian crow, *Latham.*

The CARTHAGINIAN CROW.—Thirteen inches long; plumage moſtly black, breaſt and wing-coverts blue; irides ſilvery; tail white at the tip; a ſpot of blue under and over each eye; bill and legs black. Native of Carthagena in America. — Corvus argyrophthalmus, *Gmel.* from *Jacquin.* Carthaginian crow, *Turton.*

The DOUBTFUL CROW.—General plumage ruſty brown; crown of the head and ſides black; neck and belly yellowiſh; from the baſe of the bill two white lines paſs through the orbits, and meet on the hind-head; bill and legs black. Found alſo in the country about Carthagena, with the preceding. — Corvus dubius, *Gmel.* from *Jacquin.* Doubtful crow, *Lath.*

STELLER'S CROW. — Length fifteen inches; bill black; at the gape are five or ſix black briſtles; the head is creſted, above two inches in length, compoſed of narrow brown feathers; general colour of the reſt of the plumage purpliſh black, inclining to green on the rump; half the wing-coverts are of a browniſh black, the others deep blue; the ſecond quills are alſo blue, croſſed with eight or nine bars of black, in the manner of the blue jay; the greater quills are black, with the outer edges blue green; the fore part of the neck and breaſt duſky; belly and vent pale blue; tail ſix inches long, wedge ſhaped, and deep blue; legs black. This bird was firſt noticed by Steller. It is a native of Nootka Sound, where it is met with by our laſt voyagers.—Corvus Stelleri, *Gmel.* Steller's crow, *Penn.* and *Latham.*

The WHITE-EARED CROW. — Length eleven inches; bill black; irides rufous yellow; the feathers round the baſe of the bill, the throat, and fore part of the neck, are black; top of the head bluiſh aſh-colour,

and

and a little creſted; between the black and aſh-colour on the forehead are a few white feathers; on the ears a large patch of white; the colour of the body, wing-coverts, and tail, browniſh aſh-colour; quills blackiſh, edged with grey; tail four inches long; legs pale brown. Inhabits China, and is common at Canton. They are ſeen in flocks in Dean's Iſland, Wampoo River, picking up food on the mud of the ſhore.—Corvus auritus, *Turton.* White-eared jay, *Latham.*

The Purple-headed Crow.—Bill lead-colour; noſtrils covered with reflected feathers; upper parts of the body pale rufous, beneath yellow, the head inclining to purple; quills and tail black; legs fleſh-colour. Native of China. — Corvus pyrocephalus, *Turton.* Purple-headed crow, *Lath.*

The Macao Crow. Size of a jay; bill and forehead black; irides yellowiſh; top of the head cinereous grey; neck and breaſt dirty grey; belly and thighs paler; back, and wing-coverts, rufous; rump cinereous grey; vent rufous; quills greeniſh black; on them are two white ſpots; tail and legs black. Inhabits the iſland of Macao, in China.—Corvus Macenſis, *Turton.* Pie de Macao, *Sonn.* Macao crow, *Latham.*

The Rufous Crow. Size of a blackbird: bill black; irides rufous yellow; head and neck brown: breaſt and belly rufous white; back and rump yellowiſh, inclining to rufous; leſſer wing-coverts dirty rufous; the others pale grey; ſecond quills grey without and brown within; the prime ones browniſh black; tail grey; the two middle feathers brown at the ends; the others grey as far as the middle; the reſt of the length brown, with white tips; legs black. This alſo inhabits China. — Corvus rufus, *Turton.* C. ferruginus, *Ency. Lond.* Pie rouſſe de la Chine, *Sonnerat.* Rufous crow, *Latham.*

The Colnud, or Bare-necked Daw.—Vaillant aſſerts this to belong to the genus Ampelis,

or chatterer. It feeds on grain only. The bareneſs of the neck led Buffon into the miſtake, probably becauſe our rook has the face bare. It is ſomething larger than our jackdaw; body ſtout and fleſhy. To our deſcription, vol. iv. 348, we have only to add, that the wing-coverts and quills are bluiſh grey, the primary wing and tail feathers black with a bluiſh gloſs; the reſt of the plumage, bill and feet, black; eyes brown red. Directly under the eye is a naked piece of ſkin, ſquare and yellow, which has a very ſingular effect. Inhabits Cayenne, Surinam, and all Guiana.

The female is ſomewhat ſmaller; ſhe has the naked ſkin under the eye, and the bare neck; but her wings are dark brown; her general plumage is blackiſh brown without any gloſs, with ſome faint lines of grey on the ſhoulders and breaſt. Bill and feet black brown. The young birds are alike male and female; and the neck is then entirely covered with feathers. In habits, they are like the chatterers, where Vaillant places them.—Corvus mudus, *Gmel.* Colnud de Cayenne, *Buff.* Bare-necked crow, *Lath.* and *Ency. Lond.* Cotinga col-nu, *Vaillant's Birds of America and India*, N° 45, 46.

The Bald Daw.—See vol. iv. p. 346. This alſo is placed by Vaillant among the chatterers. It was firſt deſcribed by Buffon, who called it *choucas chauve*, or bald daw, from its ſimilarity in that reſpect to the rook. Vaillant takes pains to prove that this ſpecies is not naturally bald, though no one has affirmed that it is; neither is the rook. But, what is more to the purpoſe, he aſſures us that it reſembles the chatterer in the form of its bill and feet, and in its habits. Buffon gives it long wings like the daw, whereas they reach but very little beyond the coverts of the tail, and appear longer on account of the tail being very ſhort. The plumage is rufous brown, darker on the upper ſurface; tail-quills and large upper coverts black; wing-quills

black,

black, ſlightly tinged with brown; great upper coverts partly brown partly black; ſmall coverts and dorſal feathers rufous; under coverts white, and the reverſes of the feathers gloſſy grey. Bill, feet, and nails, black; eyes brown. The bill is ſo broad at the baſe as to be equal to half its length. This bird is very common in French and Dutch Guiana. The negroes at Cayenne call it My father bird, becauſe it is bald, and the plumage nearly of the colour of the gown of a capuchin: the negroes call all monks My father. The female is ſomewhat leſs. The young bird has feathers on the head, like other birds, and the noſtrils entirely covered as in the chatterer.—Corvus calvus, *Gmel.* Choucas chauve, *Buff.* Cotinga chauve, *Vaillant.*

The Pacific Crow. Length ten inches and a half; bill notched near the tip and black; the plumage on the upper parts is cinereous, beneath paler, verging to reddiſh brown; forehead and throat paler, almoſt approaching to white; among the feathers of this part are ſome ſlender hairs; hind head and nape duſky black; quills black, with the tips dirty white; tail the ſame, all but the two middle feathers which are plain black; legs and claws black. Inhabits the regions of the Pacific Ocean.—Corvus Pacificus, *Gmel.* Pacific crow, *Lath.*

The Tropic Crow.—Length twelve inches and a half; bill broad at the baſe, and the tips of both mandibles notched; the plumage is gloſſy black above, but dull black on the under parts: wings and tail black, with a gloſs of green; vent and ſide feathers tipt with duſky white; legs black. Native of Owhyhee, one of the Sandwich iſlands, in the South ſeas.—Corvus Tropicus, *Gmel.* Tropic crow, *Lath*

The Splendid Crow.—This elegant ſpecies is deſcribed from an individual in the cabinet of M. J. Temminck, of Amſterdam. It is to be lamented that theſe collections ſeldom contain any indication of the manners and country of the ſubjects contained in

or chatterer. It feeds on grain only. The bareneſs of the neck led Buffon into the miſtake, probably becauſe our rook has the face bare. It is ſomething larger than our jackdaw; body ſtout and fleſhy. To our deſcription, vol. iv. 348, we have only to add, that the wing-coverts and quills are bluiſh grey, the primary wing and tail feathers black with a bluiſh gloſs; the reſt of the plumage, bill and feet, black; eyes brown red. Directly under the eye is a naked piece of ſkin, ſquare and yellow, which has a very ſingular effect. Inhabits Cayenne, Surinam, and all Guiana.

The female is ſomewhat ſmaller; ſhe has the naked ſkin under the eye, and the bare neck; but her wings are dark brown; her general plumage is blackiſh brown without any gloſs, with ſome faint lines of grey on the ſhoulders and breaſt. Bill and feet black brown. The young birds are alike male and female; and the neck is then entirely covered with feathers. In habits, they are like the chatterers, where Vaillant places them.—Corvus mudus, *Gmel.* Colnud de Cayenne, *Buff.* Bare-necked crow, *Lath.* and *Ency. Lond.* Cotinga col-nu, *Vaillant's Birds of America and India*, N° 45, 46.

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black, ſlightly tinged with brown; great upper coverts partly brown partly black; ſmall coverts and dorſal feathers rufous; under coverts white, and the reverſes of the feathers gloſſy grey. Bill, feet, and nails, black; eyes brown. The bill is ſo broad at the baſe as to be equal to half its length. This bird is very common in French and Dutch Guiana. The negroes at Cayenne call it My father bird, becauſe it is bald, and the plumage nearly of the colour of the gown of a capuchin: the negroes call all monks My father. The female is ſomewhat leſs. The young bird has feathers on the head, like other birds, and the noſtrils entirely covered as in the chatterer.—Corvus calvus, *Gmel.* Choucas chauve, *Buff.* Cotinga chauve, *Vaillant.*

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The Tropic Crow.—Length twelve inches and a half; bill broad at the baſe, and the tips of both mandibles notched; the plumage is gloſſy black above, but dull black on the under parts: wings and tail black, with a gloſs of green; vent and ſide feathers tipt with duſky white; legs black. Native of Owhyhee, one of the Sandwich iſlands, in the South ſeas.—Corvus Tropianus, *Gmel.* Tropic crow, *Lath*

The Splendid Crow.—This elegant ſpecies is deſcribed from an individual in the cabinet of M. J. Temminck, of Amſterdam. It is to be lamented that theſe collections ſeldom contain any indication of the manners and country of the ſubjects contained in

them. Vaillant is of opinion that it goes in flocsk like the rooks; and that it is an African bird. The epithet brilliant, or ſhining, is common to many of the birds in hot countries; but to none is it given with more propriety than to the ſubject before us. A fine green ſhaded with blue, and a purple enriched with gold, prevails on the plumage; it appears as if the moſt beautiful colours were ground and mixed together, that each might appear in a particular light, and vary its ſhade from the different points of view in which it is taken, and according as the light ſhines more or leſs on its different parts; in the ſun it is of a dazzling brightneſs. When the light ſtrikes directly upon it, the top of the head and back of the neck appear of a beautiful green, ſhining like an emerald; the lower part of the neck, where this green terminates, has a purple collar ſpangled with gold, ſpreading ſome way upon the ſcapulars, which are of a yellowiſh green, as are the throat, the front of the neck, and the breaſt. The cheeks are purple mixed with violet; the other part of the body then appears black, but in a different light is cupreous green. The ſmalleſt wing-coverts, and thoſe neareſt the pinion, are of a beautiful blue like poliſhed ſteel; ſo are the upper tail-coverts; the large wing-coverts are copper-colour with golden dots. The tail is very tapering, of a dark green changing to purple and violet. Three of the middle feathers of the wing, being partly white, form a white bar along the wing; the reſt of the feathers are of a changeable green on their outer barbs, blackiſh within and below, as well as underneath the tail. The bill and feet are black; the wings are very ſcanty, reaching but little beyond the origin of the tail—Corvus ſplendidus, the ſplendid crow, *Ency. Lond.* Eclatant, *Vaillant*, N° 85. from which the annexed Plate is copied.

The Red-billed Jay.—This ſpecies was firſt deſcribed by Buffon, and copied from him by Linnæus and Gmelin. But Vaillant maintains that Buffon's

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The Splendid Crow.

J.Pass sculp.t

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fon's deſign and deſcription are extremely defective; the two middle quills of the tail are wanting in it, as he proved by comparing his own ſpecimen with that preſerved in the national cabinet at Paris, which was the model from which Buffon's drawing and deſcription were taken. Vaillant denies alſo that it belongs to that diviſion called Jays, much leſs, as Montbeillard aſſerts, a variety of the European jay. It is properly a magpie; and comes from China, but we cannot ſay that it is found in no other part of the world. It is ſomewhat leſs than our jay; that is, not ſo thick, but including the tail conſiderably longer, as the tail itſelf is half as long again as the body. The bill and feet are not red, as Buffon aſſerts, but orange-colour; the forehead, cheeks, throat, front and ſides of the neck, are black; the top of the head is covered with bluiſh-grey feathers, which, being long and broad, form a kind of pendent creſt. The mantle and ſcapularies are of a reddiſh grey ſhaded with violet; but theſe ſhades of blue, violet, and red, are variable in different lights. The wing-quills are of the fineſt ultramarine blue; at the ends white. The feathers of the under part of the body, from the breaſt to the tail, are long, ſoft, and white. The tail conſiſts of ten quills of different lengths; the middle ones are very long, and of a blue colour, except a little black at the points, but their ends are entirely white; the other quills are black alſo on the edges, and terminate in a large white ſpot; their exterior webs are of a fine blue, the interior white; ſo that the tail is white underneath, and blue on the ſurface; the two middle tail-feathers are very remarkable; towards the extremity, the feather riſes on each ſide the quill, making a kind of hollow or gutter. No particulars are known reſpecting the modes of life of this bird; but Vaillant was induced to give a figure of it, on account of the defects he obſerved in Buffon's deſcription. Vaillant has alſo a remark on the palpable errors in many of Buffon's coloured plates; he ſays the ſpecimens of natural

natural hiſtory in the late king's, now the national, cabinet, from which his deſcriptions and drawings are taken, had been frequently fumigated with ſulphur to deſtroy the worms, which had entirely defaced or greatly changed the natural colours. As our account, vol. iv. p. 362, was compiled chiefly from Buffon, we have thought it eſſential to add the above remarks from Vaillant.—Corvus erythrorhyncos, *Linn.* and *Gmel.* Geay de la Chine à bec rouge, *Buff.* Pie blanc, *Vaillant*, N° 57.

The BLACK-CRESTED JAY of CHINA.—This beautiful bird, called by Vaillant *pie bleue à tête noire*, has lately been brought from China. It is nearly the ſize of the preceding ſpecies, which it reſembles alſo in the richneſs of its colours; but the tail is not ſo long, nor ſo ſtrongly indented. The forehead, top of the head, cheeks, and throat, are black; the feathers on the head are long, and form a black tuft, which the bird has the power of raiſing at will. Montbeillard and ſeveral other writers have placed theſe birds which have a tuft under the diviſion of Jays, eſpecially when they have ſome blue in their plumage; but we know that in moſt genera there are ſpecies that can raiſe the feathers of the head occaſionally, ſo that it cannot afford a reaſon for a permanent diſtinction; and, as to the colours, they are ſtill more variable and uncertain. But ſome naturaliſts have conceived a great analogy between the magpies and jays, more indeed than really exiſts; for their manners and habits are very different: the jays feed upon fruits and inſects; the magpies never meddle with fruit, but are carnivorous, ſeeking their nouriſhment by the wayſide, like the ravens, and in the earth, in dunghills, and infected places, where the jay is never met with. The bill of the magpie is alſo more like that of the raven, being ſhorter and more compreſſed on the ſides, and thicker than broad, while that of the jay is on the contrary more flat. The tarſus in the magpie is longer than in the jay. Their flight is very diffe-

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The African Rook.

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rent: the magpies work their wings in the air; the jays glide ſmoothly and lightly, becauſe their wings are longer and leſs rounded. So that Vaillant does not heſitate in pronouncing this, as well as the preceding, to be a magpie. The hind part of the neck, the mantle, ſcapularies, and wings, are of a delicate blue, darker on the ſmall coverts at the origin of the wings, and on the outer webs of the large quills. The quills of the tail are pointed; they are ultramarine blue in general, but white at the ends. The front of the neck, the under wing-coverts, and all the plumage of the under parts as far as the tail, are of a greeniſh white; the bill and nails black, the feet brown.—Corvus cirrhatus, the black-creſted jay, *Ency. Lond.* Pie bleue à tête noire, *Vaillant.* Upon the whole, this ſpecies greatly reſembles the Blue jay of North America, deſcribed and figured at vol. iv. p. 365. Corvus criſtatus, *Gmel.* Geay bleu de Canada, *Buff.* Pica glandaria cærulea criſtata, *Roberts.*

The Chinese Jay.—Bill bluiſh lead-colour; crown of the head brown; over each eye a line of white; through the eye, and behind it, a ſtreak of black; on the ears a ſpot of bluiſh and white, encircled with black, which colour deſcends downwards on each ſide forming a creſcent on the throat, within which it is white; the upper part of the neck and body are of a rufous bloſſom-colour; ſecond quills and tail brown; near the end is a band of black, each tail-feather tipped with a white roundiſh ſpot; legs lead-colour. Native of China.—Corvus Sirenſis, *Gmel.* Chineſe jay, *Lath.*

The African Rook.—Vaillant found this ſpecies very common at the Cape, where it is called *koorenland-kraai*, the crow of ploughed lands. It is ſimilar to the *Corvus frugilegus*, or rook of Europe, except that the baſe of the bill is not devoid of feathers. If it be true that the baldneſs of the rook ariſes from its continually thruſting the beak under ground

ground in ſearch of ſubſiſtence, the different appearance of this found at the Cape may be accounted for from its finding a more abundant proviſion above the ground. This is the more probable, becauſe young rooks have been killed in Europe whoſe roſtrum was entirely covered with feathers; but the only way to place the matter beyond doubt, would be to confine a young one in a cage for a whole year, ſo as to obſerve whether the plumage about the beak were preſerved or not.

The African rook is more plentiful in the colony, near the Cape, than in the deſerts. They approach inhabited places, where they find abundant proviſion in the cultivated lands; and they alight in great flocks upon ground newly turned up. They are not ſhy, but follow the plough to pick up larvæ, worms, and inſects. They feed alſo occaſionally upon carrion; and Vaillant affirms poſitively that the European rook does the ſame; though it has never been obſerved in England. The plumage of this bird is generally of a ſhining black, ſhaded with blue and purple, according as the rays of light fall more or leſs obliquely. The wings do not reach to the extremity of the tail. The bill, feet, and claws, are black; the eyes dark brown. The female is ſmalleſt, and her plumage not ſo gloſſy; builds either on trees or among the rocks.—Corvus Afer, *Ency. Lond.* Corneille du Cap, *Vaillant*, N° 52. See the annexed Engraving.

The Indian Daw.—This beautiful ſpecies is deſcribed and figured by Vaillant. It is nearly the ſize of the common daw, creſted and decorated with ſix unwebbed feathers or vanes, which ariſe three near each eye, and fall down over the back. The bill is pointed at the tip, and thicker at the baſe. The tail is ſquare, and conſiſts of ten feathers; the wings when folded reach about two-thirds the length of the tail. The plumage is a fine ſhining black, changing to dark green on the wings. The creſt is made up of delicate looſe feathers, which fall back and cover the

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The Indian Dan.

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the head; quite black at the top, and red at the ſides. The long vanes or feathers without webs, which ornament the ſides of the head, reſemble thoſe in the royal bird of paradiſe. Three of them ſpring from under each eye, rather on one ſide, juſt between the eye and ear. The lower one, which is the ſhorteſt, is ſeven inches long, and is of a reddiſh colour for the greateſt half of its length. The ſecond is three inches longer; it is black at its origin, and for more than half its length; the reſt red. The third on each ſide is much the longeſt, reaching ſeven inches beyond the tail, and is a reddiſh yellow towards the end. Theſe filaments are real feathers, or rather ſtems of quills, for they have no webs; nor can even the origin of any be diſcovered by the microſcope; they enter about a line and a half deep in the fleſh, and are exactly of the ſame nature with the other quills, being hollow and tubular; each one having a long furrow underneath, dividing it equally, and is articulated tranſverſely all along, the joints being not above a line aſunder, as might be felt by paſſing the finger along. It is probable the bird has the faculty of raiſing theſe filaments, and conſequently of drawing them cloſe to the body when flying; for they would render the flight irregular, if they were ſubject to play about with the wind; and, from the depth they enter into the ſkin, it ſeems likely that they penetrate the extenſor muſcle, which may render them ſubject to the will of the animal; the ſkin alſo in that part of the cheek whence they ſpring, is thicker and harder than in any other part, and a deep cavity is obſerved if one of them be drawn out, in the ſame manner as when a wing or tail feather of any bird is extracted. The uſe of theſe vanes is not known; probably they are only an ornament. The feet are ſhaped as in the reſt of the genus; the bill is lemon-colour, more inclining to orange above; the noſtrils are covered with briſtly hairs, directed

forwards, as in all the other ſpecies; feet and nails black.—Corvus Indicus, *Ency. Lond.* Sicrin, *Vaillant*, N° 82.

The Choucador Daw.—The plumage of this does not yield to the preceding in brilliancy and variableneſs; and with that it might be eaſily confounded on a ſlight view. This, however, is not ſo large; but it is ſpecifically diſtinguiſhed by the tail, which is ſhorter, and almoſt ſquare, the lateral quills being not above half an inch ſhorter than the middle ones; whereas the tail of the former we have ſeen to be very unequal, or tapered. Neither has the choucador the white bar on the wing; the reſt of the colours are nearly the ſame, though differently diſtributed. The head, back and ſides of the neck, and pinions, are of a very bright gold green; the mantle and ſcapulars of the pureſt gold-colour highly burniſhed; the large wing-coverts are the colour of poliſhed ſteel, ſet off with purple, and varying from ultramarine blue to dark emerald green; the wing-quills are gloſſy black, but violet varying to purple at their origin, and terminating in a rich gold-colour, which tips the outer webs. The quills of the tail are of a copper-colour ſpread like a thin powder, eſpecially on the mid-quills; the laterals are bordered with dull green, which at the extremities takes a beautiful ſhade of blue or violet, according as they are turned towards the light. The front of the neck, the breaſt, and under parts of the body, are gold-colour ſhaded with violet, ſimilar to the ſcapulars, but not ſo bright as on the parts above. The upper and under tail-coverts, and the lower belly, are dark green; the quills are all black underneath. This ſpecies is deſcribed from a ſtuffed bird in the cabinet of M. Ray of Breukelerwaard: its country is not known.—Corvus choucador, *Ency. Lond.* Choucador, *Vaillant*, N° 86.

The Senegal Magpie.—Vaillant gives the name

name of *piapiac* to the only ſpecies of magpie he found in Africa, and which he met with only in the moſt diſtant part of the country of the Great Namaquois. It ſeems to be the ſame with that called the Senegal magpie, vol. iv. p. 354. but Vaillant ſuppoſes the ſpecimen from which Buffon's drawing was taken to have been a young one not full grown; for the tail is neither ſo long nor ſo tufted; his bird is alſo ſmaller upon the whole, and the wings not ſo brown; all which diſtinctions agree with the piapiac while young; ſo that, not being confined to Senegal, he has given it a more appropriate name, a name analogous to the cry it utters in a wild ſtate, the only one it is known to emit, and which it pronounces as diſtinctly as man could do.

Theſe birds perch on the tops of high trees, and are ſometimes ſeen in flocks of about twenty. The males have a very long tail, longer than the European magpie, but not ſo thick, the quills being narrower and pointed. It flies ſwifter and better, on account of the length of the wing-quills in proportion to the weight of the body. Like our magpie, it builds its neſt on the top of tall trees, cloſing it with thorns on every ſide, except one ſmall horizontal hole. The eggs are ſix or eight in number, of a bluiſh white, with ſpots of brown, which are larger and more numerous towards the big end of the egg. Vaillant was aſſured by the natives, that this bird was ſeen at this place only in certain parts of the year. He thinks it ſingular, that, flying ſo well, this ſpecies has never found its way into countries nearer to the Cape, or even to the confines of the Rio Grande; but he never ſaw or heard of it in thoſe parts.

This magpie is of a gloſſy black, but not ſo dark on the belly as on the back; the primary wing-quills, and the lateral ones of the tail, have a ſhade of brown. The feet and bill are perfectly black, like our European ſpecies; and the eyes are nut-brown.

The female is rather leſs than the male, and her tail is ſhorter.

In the collection of M. Ray de Breukelerwaard, at Amſterdam, is a variety of this ſpecies, ſaid to have come from Senegal, which is very remarkable for the peculiarity of having a double quill in the tail; this ſecond quill ariſes out of the ſame tube, and is as long as the firſt, but has no feathers upon it.—Corvus Senegalenſis, *Gmel.* C. piapiac, *Ency. Lond.* Pie du Sénégal, *Buff.* Pica Senegalenſis, *Briſſ.* African crow, *Lath.* Piapiac, *Vaillant*, N° 54.

The Red-bellied Magpie.—Not knowing any thing of the manners and habits of this bird, which had never before been deſcribed, but was examined by Vaillant in the collection of M. Ray de Breukelerwaard, at Amſterdam, it is placed next to the Senegal magpie, becauſe it reſembles it in ſhape of body and tail; yet its bill is weaker than moſt of the magpies. This ſpecies is ſaid to come from the South-Sea iſlands; it is about the ſize of the common blackbird; but the tail is tapering, half as long again as the whole body, and has only eight quills, in which it ſeems to differ from any bird yet known. The upper part of the body, head, neck, ſcapulars, and breaſt, are of a gloſſy black, with ſteel-blue ſhades in certain poſitions of the rays of light; the two middle feathers of the wings are of a dark red; the reſt, and the tail, perfectly black. The feathers upon the belly, flanks, legs, and under the tail, are pale red, or fleſh-colour, like the pewit. The bill, feet, and claws, are black.—Corvus ruber, the red-bellied magpie, *Ency. Lond.* Pie à culotte de peau, *Vaillant*, N° 55.

The Temia Magpie.—This has greater affinity to the Engliſh magpie than the preceding; but of its habits, modes of living, and even from what part of India it comes, we are entirely ignorant. The following

The Rufous Magpie. of Bengal.

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lowing deſcription is from a ſpecimen in the cabinet of M. Temminck, treaſurer to the India Company at Amſterdam; and its name is formed from his. It is about the ſize of a thruſh, but longer; the tail is very long, and conſiſts of ten feathers; the four middle ones are of equal length; the others are ſucceſſively ſhorter and ſhorter. The bill, feet, and claws, are black; all the feathers on the body are long, ſoft, and ſilky to the touch; by an indifferent light they appear black; but have green or purple reflections, according as the rays of light fall upon them. The forehead and the ſpace between the eyes and the bill are covered with minute feathers, ſo cloſe together as to be a dead black without any gloſs or reflection, like velvet. The wing-quills are blackiſh; the four middle quills of the tail are greeniſh; the reſt have only their outer edges of that colour; ſo that the under part of the tail is blackiſh, and the upper part of a dull green. This bird was brought from Batavia; but, as moſt veſſels going to and from the Indies touch there, it might have come originally from ſome other part of the world.—Corvus temia, *Ency. Lond.* Temia, *Vaillant*, N° 56.

The RUFOUS MAGPIE of BENGAL.—This is placed among the magpies on account of its exterior form, though it is not much larger than the great cinereous ſhrike of Europe, which it reſembles in many other reſpects, and may be regarded as the connecting link between the magpies and the ſhrikes; for theſe have much ſimilarity, and hence Vaillant places them in ſucceſſion. This bird is a native of Bengal. Vaillant calls it *pie rouſſe;* but the name it bears in its own country is not known, any more than its habits and modes of life; ſo that we can only deſcribe its colours, referring to the annexed figure. The bill is the colour of horn, and very ſtrong in proportion to the ſize of the bird. The head and neck are black inclining to brown, but

ſlightly

ſlightly tinged with red; the reſt of the plumage underneath, as far as the under-coverts of the wings, is fleſh-colour; the mantle is umber-brown; the croup and upper wing-coverts are of the ſame light-red as the belly; the wing-quills are dark brown, the laſt having their outer webs of a whitiſh grey, and the ſame colour prevails over the ſmall and large feathers which cover the wings. The tail conſiſts of ten quills, tapering like thoſe of the common magpie; they are moſtly a brown black on their exterior edges, the longer quills partaking more and more of light grey, ſo that the two middle ones are almoſt entirely of that colour; they all have a ſpot at the extremity, red above, white underneath. The feet and nails are brown; the wings when cloſed extend not much beyond the origin of the tail. The noſtrils are covered with little feathers pointing forwards, and there is a kind of hairs at the corners of the mouth. — Corvus rufus, *Ency. Lond.* Pie rouſſe, *Vaillant*, N° 59.

The Shrike Magpie.—This is ſtill ſmaller than the preceding, and approaches nearer to the butcher-birds, or ſhrikes; which has occaſioned this compound name to be given to it. It is about the length of the cinereous ſhrike, but thicker in the body. The deepeſt black and the pureſt white ornament its plumage; and, though theſe are the only colours, they are ſo agreeably diſpoſed as to form one of the prettieſt birds which adorn collections of natural hiſtory. The head, neck, and breaſt, are of a ſhining black; the feathers on the upper part of the breaſt are long and narrow, and lie looſely with their points over the pure white of the reſt of the under part of the body, including the under tail-coverts; the mantle is partly white; the wings are black with white ſpots; the croup and upper tail-coverts are of a ſhining white, admirably contraſting the ten black quills of the tail; which are tapering, and each terminating

minating in a white ſpot. The bill is ſhort and thick, of a ſhining black, as are the feet and nails. In ſeveral cabinets this is deſcribed as a Chineſe ſpecies, which Vaillant doubts, becauſe he received the ſpecimen in his own poſſeſſion from Cayenne; and he adds that it was ſtuffed and prepared after the manner uſed in that iſland, which he ſays is different from any other; ſo that he is very much inclined to the opinion that Cayenne is the native place of this laſt of the magpies.—Corvus lanius, *Ency. Lond.* Pic pie-grêche, *Vaillant*, N° 60.

The Blue Crow.—About nine inches long; top of the head ſhining gloſſy black; body aſh-colour, paleſt beneath; wings and tail of a moſt beautiful blue; the laſt very long, the feathers ſhortening by degrees, and white at the tips. Inhabits Dauria, where it arrives in April. Dr. Pallas ſays it is a very timorous bird, though crafty, noiſy, and clamorous.—Corvus cyaneus, *Gmel.* and *Pallas.* Blue crow, *Latham.*

The African Crow.—Length one foot ten inches; bill red; head and neck dark purple, ſomewhat creſted, each feather tipped with grey as far as the hind-head; back brown; belly pale aſh-colour; quills bluiſh on the outer edges; two middle tail-feathers twelve inches long, the outer ones ſhort; all of them tipped with white; legs red. Native of Africa.—Corvus Africanus, *Gmel.* African crow, *Lath.*

The Surinam Crow.—Size of the common crow; bill duſky; head deep green; hind part rich blue; beneath that pale green; under each ear, and on the hind part of the neck, a ſpot of the ſame; neck, breaſt, belly, back, and wing-coverts, beautiful changeable green; prime quills duſky, ends rich blue; tail duſky; legs fleſh-colour. Native of Surinam.—Corvus Surinamenſis, *Gmel.* Surinam daw, *Brown.* Surinam crow, *Lath.*

The Short-tailed Crow.—Size of a black-bird;

bird; bill grey brown; corners of the mouth orange; irides whitiſh; head and throat black; over the eye a fulvous ſtripe, from the noſtrils to the hind-head; hind-part of the neck, the back, and ſcapulars, beautiful green; throat, neck, breaſt, belly, ſides, and thighs, fulvous; under the wings, black; ſmaller wing-coverts ſhining blue green; greater ones the ſame as the back; quills black; on the ſix firſt a white ſpot about the middle. Tail ſcarcely an inch in length, black, tipped with green. Legs orange. Native of the Molucca iſles. There are ſix other varieties of this bird, ſomewhat ſmaller, and varying a little in the plumage.—Corvus brachyurus, *Linn.* and *Gmel.* Merle verd des Moluques, *Briſſ.* Breve, ou merle, de Bengal, *Buff.* Short-tailed crow, *Lath.*

The Cayenne Crow.—Size of a miſſel-thruſh; bill curved the whole length, red like fine ſealing-wax; noſtrils covered with black briſtles; head, upper parts of the body, wings, and tail, black; wing-coverts mottled with white; under parts of the body aſh-colour; legs duſky. Native of Cayenne.—Corvus auſtralis, *Gmel.* C. Cayennenſis, *Ency. Lond.* Cayenne red-billed crow, *Latham.*

CORACIAS, the ROLLER.

The Green Roller.—This is a new ſpecies, apparently much allied to the common or garrulous roller, yet differing from it ſufficiently to conſtitute a diſtinct and ſeparate ſpecies. We are ignorant of its native country; or at leaſt of the diſtrict of India from which Monſ. Poivre, a traveller who was much intereſted in the progreſs of natural hiſtory, and to whom that ſcience lies under many obligations, imported it into Europe. This roller, which is called *green*, becauſe ſuch is, in fact, the prevailing colour of its plumage, is of ſomewhat ſmaller dimenſions than the garrulous roller. The front feathers up to the eyes, and thoſe near the baſe of the bill and throat

throat, are of a reddiſh white: the head, neck, upper part of the back, all the ſcapular feathers, thoſe of the wings next the body, and, in general, all their upper coverings, are of fine beryl-green. All the under feathers, from the reddiſh-white of the throat to the lower part of the belly, are alſo of the ſame green caſt, yet of a brighter tint; which, aſſuming a white ſhade towards the abdomen, paſſes at length to a white, lightly tinged with the ſame green on the under covering of the tail. The firſt ſix large wing-feathers are of a beautiful blue, inclining to purple, while the next in order are lightly tipped with green. The rump-feathers and upper coverings of the tail are of a bluiſh green, as are the two intermediate tail-feathers; except that, when they are diſconnected with the tail, they are blue both on the upper and under ſurface, though of a lighter tinge on the latter. The green roller is very rare. The only ſpecimen which I have ſeen (ſays Vaillant) belongs to my own collection, as it formerly did to that of M. Aubri, miniſter of the church of St. Louis at Paris. I purchaſed it at the ſale of that gentleman's cabinet, which took place in conſequence of his death. In his lifetime, he aſſured me that he had it from M. Poivre. —Rollier verd, *Vaillant's Birds of Paradiſe, &c.*

The INDIAN ROLLER.—Specific character, general colour blue; the fore-part teſtaceous; cap green. The bill is black, an inch and a half long; crown bluiſh green; neck and upper part of the back teſtaceous; temples and chin ſtreaked with purple and white; wings mixed green and blue; outer tail-feathers in the middle ſea-green. Inhabits Ceylon; eleven inches long.—Coracias Indica, *Gmel.* Blue jay from the Eaſt Indies, *Edwards.* Indian roller, *Latham.*

The CAPE ROLLER.— Plumage moſtly blue; quill-feathers pale yellow at the outer edge. Inha-

bits Ethiopa; the female bluiſh black.—Coracias Caffra, *Gmel.* Cape roller, *Latham.*

The BLUE ROLLER.—General colour blue daſhed with pale green; beneath ruſty; wings tipped with black.—Coracias cœrulea, *Gmel.* Blue roller, *Lath.*

The ULTRAMARINE ROLLER.—This bird is of a moſt beautiful vivid blue; bill dirty-aſh colour; length eight inches.—Coracias cyanea, *Gmel.* Ultramarine roller, *Latham.*

The FAIRY ROLLER.—Plumage principally blue; neck on the fore-part and ſides, breaſt, belly, quill-feathers, and greater wing-coverts, black; bill ſtrong, and with the legs black; wings with three ſmall blue ſpots; tail duſky-blue. Inhabits India; ſize of a blackbird.—Coracias puella, the fairy roller, *Turton.*

The BLUE STRIPED ROLLER.—Plumage bluiſh-black with greeniſh-blue ſtreaks; bill, tail, and legs, black: female cinereous grey, not ſtreaked; quill-feathers black, edged with cinereous; irides red. Inhabits New Caledonia; eight inches long.—Coracias ſtriata, *Gmel.* Blue ſtriped roller, *Latham.*

The PIED ROLLER.—Moſtly black; beneath, lower part of the back, rump, and upper tail-coverts, white; tail equal, tipped with white; bill bluiſh; two inches and a half long. Wing-coverts variegated with black and white, the ſecondary ſome of them black, ſome white; two middle tail-feathers quite black; greater quill-feathers, and outer edge of the wings, black. Legs plumbeous; claws ſtrong, ſharp, black. Inhabits New Guinea; thirteen inches long; it is of a doubtful genus, between the Oriole, Coracias, and Ramphaſtos.—Coracias varia, *Gmel.* Caſſican de la Nouvelle Guinée, *Buff.* Pied roller, *Latham.*

The RED-BREASTED ROLLER.—Something leſs than the common crow. Body uniformly black, with a ſlight bluiſh gloſs on the back and wings. Beak ſtrong, broadiſh at the baſe, and ſlightly notched at the

the tip; lower mandible paliſh towards the tip; each ſide of the upper mandible are ſeven hairs, flattened at the lower part and riſing in a curved direction. Two outer tail-feathers ſhorter than the reſt. Legs black; claws ſtrong; that of the back toe larger than the reſt.—Coracias ſcutata, the red-breaſted roller, *Turton.*

The GREY-TAILED ROLLER.—Specific character, the head and neck black; body above ruſty-brown, beneath cinereous; wings white in the middle; tail very long, wedge-ſhaped; grey, tipped with black. Bill black; legs cinereous; wing-coverts ruſty-brown; greater and ſecondary quill-feathers white, the primary black. Inhabits India; ſeventeen inches long.—Coracias vagabunda, the grey-tailed roller, *Turton.*

The TAME ROLLER.—Plumage white, interſperſed with reddiſh; beneath bay; legs yellow; tail-feathers black tipped with white. Bill yellow; nine firſt quill-feathers white as far as the middle, and then black, the reſt wholly black; claws fleſh-colour. Inhabits ſouthern Aſia; ſize of a black-bird; is docile and imitative.—Coracias docilis, *Gmel.*

The CRIMSON ROLLER.—Body a rich vivid crimſon; bill orange; head ſlightly creſted; ſide-feathers longer than the reſt; legs duſky; long quill-feathers and tail black. Inhabits Cayenne; is probably not of this genus.—Coracias militaris, *Turton.*

The BLACK ROLLER.—The whole body and limbs black; bill ſtrong; tail ſeven inches long; total length ſixteen inches.—Coracias nigra, *Turton.*

The AFRICAN ROLLER.—The upper parts of the body ferruginous; beneath lilac; vent green-blue; quill and tail-feathers blue, with blackiſh tips. Body ſtout; bill yellow; legs brown. Inhabits Africa; eight inches and a half long.—Coracias Afra, *Turton.*

The Black-headed Roller.—General caſt of the plumage purple-blue; head and neck black; body beneath white; quill-feathers brown; tail wedge-ſhaped. Bill and legs red; nape pale grey; two middle tail-feathers blue, the reſt purpliſh, all tipped with white. Inhabits China; ſize of a crow.—Coracias melanocephala, *Turton.*

The Noisy Roller.—Body principally black, with a ſpot on the wings; vent, baſe, and tip of the tail, black. Bill two inches and a half long; ſtraightiſh, black, toothed, and horn-colour, near the tip; noſtrils, naked, long, placed at the baſe of the bill. Six firſt quill-feathers white at the baſe, forming the ſpot on the wings; vent and lower tail-coverts white; tail long, round, the large feathers white at the baſe, the lateral ones within tipped with white; wings, when folded, reach as far as the middle of the tail. Legs black, the outer toe connected at the baſe to the middle one, which very much aſſimilates it to the crow. Inhabits Norfolk Iſlands in great numbers; nineteen inches long; is fooliſh, and very noiſy by night.—Coracias ſtrepera, *Turton.*

ORIOLUS, the ORIOLE.

The Climbing Oriole.—Specific character, colour tawny; head, neck, and breaſt, ſpotted with white; tail rounded. Bill yellowiſh-grey; colour of the belly inclining to brown; legs blackiſh. Inhabits among trees in Guiana, which it climbs like a pie, and picks out inſects from under the bark; ſeven inches long.—Oriolus picus, *Gmel.* Talapiot, *Buff.* Climbing oriole, *Latham.*

The Painted Oriole.—Specific character, front red; nape orange; back yellow; cheeks, rump, and belly, bluiſh; ſhoulders brown; quill and tail-feathers black. Inhabits America.—Oriolus pictus, *Turton.*

The Red-breasted Oriole.—Specific character,

ter, colour black; chin, throat, breaſt, and upper angle of the wings, red. Inhabits Guiana and Cayenne: ſeven inches long; ſings pleaſantly; imitates the notes of other birds; builds a long cylindrical penſile neſt.—Oriolus Americanus, *Gmel.* Merula Indica, *Ray.* Troupiale de Cayenne, *Buff.* Mocking-bird of Guiana, *Bancroft.* Red-breaſted oriole, *Latham.*

The RICE ORIOLE.—Black; head, neck, and breaſt, with a purple ſhade. Bill one inch and a half long, convex and protuberant at the baſe. Inhabits Cayenne; nine inches long.—Oriolus oryzivorus, *Gmel.* Rice oriole, *Lath.*

The HUDSON'S-BAY ORIOLE.—Blackiſh-green; head, chin, outer quill-feathers, thighs and ſtreaks on the breaſt white. Inhabits Hudſon's Bay; eight inches and a half long.—Oriolus Hudſonius, *Gmel.* Hudſonian white-headed oriole, *Penn.* This is placed as a variety of the Louiſianian oriole, in *Turton's Linn.*

The AFRICAN ORIOLE.—This is ſaid by Vaillant to be the only ſpecies which breeds in the ſouth of Africa, where it ſpends the greateſt part of the year, but not without moving from one woody canton to another, as the fruits ripen in different quarters. The head of the male is entirely black, which colour pervades the throat and front of the neck quite to the breaſt, where a fine jonquil-yellow begins, and covers all the under parts. The upper ſurface, from the hind-head, is moſtly yellow (differing chiefly in this from the black-capped oriole, O. Mexicanus, vol. iv. p. 389. which has a black mantle;) but receives an olive tint on the back, ſcapulars, wing and tail coverts, and the four mid-quills of the tail; on the wings there is a good deal of black, tipped and edged with ſhades of white, grey, and yellow; the four lateral tail-quills on each ſide are black within and yellow without, the black increaſing on thoſe

neareſt

neareſt the middle. The bill and eyes are brown red; legs and feet lead-colour; nails brown. The female is leſs than the male; her black hood is tinted with olive, and her bill brown. In the young bird the hood is olive grey, and does not extend ſo far; and thoſe parts which are to be yellow, are as yet olive green.

This ſpecies is very frequent in the foreſts of the eaſtern coaſt of Africa, from the Saumache or Brak River quite to Caffraria; but only in large woods and on the higheſt trees. It is ſuppoſed to inhabit alſo Senegal, Angola, and Abyſſinia. The neſt is made of bits of wood and fibres of roots, covered on the outſide with moſs, and lined with feathers; the eggs are four in number, of a dirty white, with brown ſpots collected at the large end like a crown; the male ſits alternately with the female, and the incubation laſts eighteen days. This bird has ſuch a varied ſong, that you might think you heard ſeveral different kinds, or at leaſt a bird that was endeavouring to imitate the notes of other birds: but in the love-ſeaſon the ſong is more uniform, and the ſyllables *cou-dou-gnan* may be readily diſtinguiſhed, being expreſſed with great harmony and ſtrength. — Supposed to be the Moloxita, ou Religieuſe d'Abyſſinie, of *Buffon*. Loriot coudougnan, *Vaillant*, N° 261, 2.

The Red Oriole. — Specific character, colour vermilion; wings, belly, and tail, deepeſt black. Bill and legs black; irides flame-colour. Inhabits Antigua.—Oriolus ruber, *Gmel.* Troupiale rouge d'Antigue, *Sonnerat.* Red oriole, *Latham.*

The Guiana Oriole.—Specific character, colour blackiſh, edges of the feathers grey; breaſt and neck beneath red. Tail ſtriate with grey; legs and claws brown. Inhabits Guiana; above ſeven inches long.—Oriolus Guianenſis, *Gmel.* Troupiale de la Guiane, *Buff.* Guiana oriole, *Lath.*

The

The ANTIGUA YELLOW ORIOLE. — Golden; hind-part of the back, wings, and tail, black. Bill and legs black; irides red. Inhabits Antigua and South America.—Oriolus flavus, *Gmel.* Troupiale jaune d'Antigue, *Sonnerat.* Antiguan yellow oriole, *Latham.*

The VARIEGATED ORIOLE.—Specific character, black; beneath, rump and ſmaller wing-coverts ferruginous. Bill and legs dark blue; outer edges of the ſecondary quill-feathers dirty-white. Sometimes varies in having the head and neck variegated with blackiſh and greeniſh; chin and throat black; breaſt cheſnut; belly yellowiſh; quill and tail-feathers blackiſh edged with white: probably occaſioned by difference of ſex. Inhabits Cayenne; ſix inches long.—Oriolus varius, *Gmel.* Carouge de Cayenne, *Buff.* Cheſnut and black Baltimore, *Lath.*

The St. DOMINGO ORIOLE.—Specific character, black; body on the hind-part, wing-coverts, and ſpot on the wings, pale yellow. Inhabits New Spain, Jamaica, and St. Domingo; eight inches long; builds a purſe-ſhaped neſt on the extreme branches of trees, hanging over water. — Oriolus Dominicenſis, *Gmel.* Carouge de St. Domingue, *Buff.* St. Domingo oriole, *Latham.*

The BRASILIAN ORIOLE.—Yellow; head, throat, ſpot on the ſhoulders, wings, and tail, black. Bill black; wing-coverts with a white ſpot in the middle; legs brown. Inhabits Braſil; fixes its neſt to a plantain-leaf by means of filaments; ten inches long.—Oriolus jamacaii, *Gmel.* from *Will. and Ray.* Braſilian oriole, *Lath.*

The WHITE-WINGED ORIOLE. — Specific character, black, with a white ſpot on the wings. Female cinnamon-brown; beneath ſomewhat cinereous. Inhabits Cayenne and Surinam; eight inches long. —Oriolus leucopterus, *Gmel.* White-winged oriole, *Lath.*

β. There is a variety met with at New York.—White-backed oriole, *Penn.* White-backed maik-thieves, *Kalm.*

The BLUE ORIOLE.—Specific character, black or cinereous; head, wings, and tail, blue. Bill tawny. Inhabits Madras.—Oriolus cœruleus, *Gmel.* Small blue jay, *Ray.* Xanthornus cœruleus, *Briſſ.* Blue oriole, *Lath.*

The TRIPLE-STRIPED ORIOLE.—Bluiſh lead-colour; head with a triple ſtripe of black, and waved with black on the ſides; lower part of the back and rump jonquil-yellow. Bill duſky; ſtripes on the head commencing at the upper mandible, and from thence dividing and paſſing over the head and through the eyes each ſide; behind each eye a longitudinal white ſtreak extending ſome way down the neck; larger quill-feathers black, ſhorter tipt with white; two outer tail-feathers each ſide white, the reſt black; legs reddiſh-brown. Inhabits India.—Oriolus trifaſciatus, *Turton.*

The YELLOW-THROATED ORIOLE.—Green; eyebrows, cheeks, and chin, yellow; ſome of the wing-coverts tipped with white. Bill corneous; legs grey. Inhabits Hudſon's Bay; nine inches long.—Oriolus viridis, *Gmel.* Yellow-throated oriole, *Penn.*

The RUSTY ORIOLE.—Black; edge of the wings ruſty; head and neck purpliſh-black; belly dirty-aſh. Bill and legs dirty-aſh; area of the eyes black; wings and tail with a greeniſh ſhade. Inhabits New York; from ſeven to eight inches long.—Oriolus ferrugineus, *Gmel.* Ruſty oriole, *Penn.*

The BROWN-HEADED ORIOLE.—Black; head ruſty-brown; tail dirty-aſh. Inhabits New York; gregarious.—Oriolus fuſcus, *Gmel.* Brown-headed oriole, *Penn.*

The OONALASHKA ORIOLE.—Specific character, brown; ſpot under the eyes and chin white; throat and breaſt ruſty-brown. Bill and legs brown. Inhabits

Inhabits the iſland of Oonalaſchka; eight inches long. —Oriolus Aoonalaſchkenſis, *Gmel.* Aoonalaſchkan oriole, *Lath.*

The SHARP-TAILED ORIOLE.—Variegated; tail-feathers ſharp-pointed. Bill and legs duſky; crown brown or cinereous; cheeks brown; thighs and vent pale yellow ſpotted with brown; belly white; back varied with cinereous, black, and white; quill-feathers and wing-coverts brown, the latter edged with ruſty; tail duſky-olive, with pale bands. Inhabits New York; ſize of a lark.—Oriolus caudacutus, *Gmel.* Sharp-tailed oriole, *Penn.* and *Lath.*

The PARADISE ORIOLE.—Specific character, colour tawny-yellow; frontlet, chin, primary tail-coverts and feathers black at the extremity. Bill brown. Inhabits India; eight inches long.—Oriolus aureus, *Gmel.* Rollier de paradis, *Buff.* Golden bird of paradiſe, *Lath.*

The FORK-TAILED ORIOLE.—Specific character, black; back, rump, quill-feathers, and forked tail, inclining to blue; lower tail-coverts white. Bill yellow; tail long; legs and claws black. Inhabits New Spain; ſize of a blackbird.—Oriolus furcatus, *Gmel.* Icterus cauda bifida, *Briſſ.* Fork-tailed oriole, *Latham.*

GRACULA, THE GRAKLE.

The FETID GRAKLE.—Specific character, plumage black, quill-feathers bluiſh; band round the neck naked; head with erect ſhort ſilky feathers; bill like that of the cuckow; noſtrils oval, naked; tongue ſharp; tail even. Inhabits America: ſize of a magpie.—Gracula fœtida, *Gmel.* Fetid grakle, *Latham.*

The DIAL GRAKLE.—Upper parts bluiſh-black; belly, ſpot on the wings, and lateral tail-feathers, white. Inhabits Bengal: ſize of a thruſh.—Gracula

ſaularis, *Gmel.* Bengal magpie, or dial-bird, *Albin;* (ſee vol. iv. p. 182.) Dial grakle, *Latham.*

The Egyptian Grakle.—Superior part of the body greeniſh-blue; belly ferruginous, legs blood-red. Neck with a longitudinal ruſty line at the ſides. Inhabits Egypt; four inches long; feeds on inſects. —Graculus atthis, *Gmel.* Corvus Ægyptius viridi-maculatus, *Haſſelqu.* Egyptian grakle, *Lath.*

The Long-billed Grakle.—Specific character, body brown; beneath ochre-yellow; head and neck black; band round the neck naked, wrinkled; area of the wings white; tail wedge-ſhaped; black, white at the tip. Bill black, long; noſtrils placed in the middle; tongue deeply cleft, the edges jagged; irids duſky; firſt quill-feathers obliquely white at the baſe; legs long, ſtout, black; body, ſlender. Inhabits South America; about eight inches long.—Gracula longiroſtra, *Gmel.* Gr. brunnea, *Pallas.* Long-billed grakle, *Latham.*

There is a variety of this ſpecies of a ſhining black; ſome of the feathers of the ſhoulders and tail yellow; found in the Sandwich iſlands. — Oriolus nobilis, *Merrem.*

The Daurian Grakle.—Plumage hoary; ſpot on the crown and back between the wings violet black; tail and wings with a ſhade of green, the latter with a double white ſtripe. Inhabits the ozier banks of Dauria; in its neſt and eggs reſembles the thruſh. — Gracula ſturnina, *Gmel.* Gr. cana, *Pall.* Daurian grakle, *Ency. Lond.*

The Yellow-faced Grakle. — Body black; band on the wings and body beneath white; region of the eyes naked, wrinkled. Bill compreſſed; noſtrils oval; legs yellow. Inhabits New Holland.—Gracula icterops, the yellow-faced grakle, *Turton.*

The Climbing Grakle. — Plumage ſtriate; above tawny, beneath yellowiſh; head and chin varied with tawny and white; tail wedge-ſhaped, ſharp, and

and with the wings tawny. Bill black, near two inches long, a little curved; legs black. Inhabits the interior parts of Guiana; climbs trees like the woodpecker. — Gracula Cayennenſis, *Gmel.* Picucule de Cayenne, *Buff.* Climbing grakle, *Lath.*

The COCKSCOMB GRAKLE.—Upper parts of the body cinereous; tail and quill-feathers black; crown and chin with warty excreſcences. Inhabits the Cape of Good Hope: ſix inches long.—Gracula carunculata, *Gmel.* Tringa carunculata Capenſis, *Walch.* Cockſcomb ſtare, *Lath.*

PARADISEA, THE BIRD OF PARADISE.

IN the year 1804, M. Vaillant began to publiſh a work upon the hiſtory of a few genera only of birds; namely, the Birds of Paradiſe, Rollers, Promerops, Toucans, and Barbets. From that work we have extracted the natural hiſtory of the Green Roller, a new ſpecies; and we ſhall now copy his deſcription of the beautiful long feathers which characterize the Great Emerald Bird of Paradiſe, as it may ſerve to correct our account in vol. iv. p. 411.—"Theſe feathers proceed from the flanks, paſs beyond the tail with which they are blended, and form behind it a maſs of extreme tenuity, light and tranſparent as air. Naturaliſts diſtinguiſh them by the epithet *ſubalarian*, becauſe they have their origin under the wings. Their total amount exceeds 600, though Buffon mentions only 40 or 50 on each ſide. I have had the patience to count them in fifty individuals, all very entire; and I have reckoned from 260 to 310 on a ſide. Their forms, colours, and natures, vary according to their poſitions. The largeſt meaſure from twenty to twenty-two inches in length, and have long downy beards, which are ſo many ſmall feathers, with their complete complement of beardlets, perfectly viſible. They are of a bright brown colour, and terminate in a long hairy filament. The ſecondary,

which cover the firſt. have ſmooth and gloſſy beards, and are of a beautiful jonquil yellow. The third ſet is compoſed of feathers, ſimilar to the ſecondary, which they cover. They are very narrow, preſent the ſame yellow hue at their baſes, and are tipped with a glowing purple, finely contraſting with the yellow ground on which they are diſtributed by gradations, the ſmalleſt occupying the upper range. The ſpace on the ſide between the thighs and breaſt, which is covered by all theſe ſubalarian feathers, ſcarcely exceeds two ſquare inches. Theſe gaudy appendages are cloſely preſſed on one another, and imbedded ſo deeply, that their quills are viſible through the ſkin, which they completely tranſpierce; thus proving their inſertion in an extenſor muſcle, which enables the bird to erect them at pleaſure, like the peacock when he diſplays the glories of his rump-feathers, vulgarly and very improperly called his tail. This latter appellation has been alſo frequently beſtowed on the ſubalarian plumage of the bird of paradiſe, though he has a diſtinct and very beautiful tail.

The GRAKLE PARADISE-BIRD.—This ſpecies has been deſcribed among the Grakles, (vol. iv. p. 407.) to which indeed it has a great affinity in all its habits, and where it is placed by Latham.—Paradiſea triſtis, *Gmel.* Paradiſe-grakle, *Latham.*

The CRESTED PARADISE-BIRD.—Specific character, head, neck, and wings, black; tuft of hairs near the crown, and frontlet, yellow. Bill very long, black, hooked; tuft on the crown three inches high, rigid, appearing as if briſtly: probably a variety of the Magnificent Bird of Paradiſe, vol. iv. p. 416. Inhabits New Guinea; eighteen inches long.—Paradiſea cirrata, *Turton.*

The GORGET PARADISE-BIRD.—Black; beneath ſlight green; hind-head, nape, crown, and band on the middle of the belly, fine green; under the chin a ſplendid

ſplendid gold-colour creſcent. Tail-feathers twelve, unequal, the two middle ones twenty-two, the outer ones five, inches long. Inhabits the iſlands of the Indian Ocean; twenty-eight inches long.—Paradiſea nigra, *Gmel.* Gorget paradile-bird, *Latham.*

The WHITE-WINGED PARADISE-BIRD.—Black; crown ſhining copper; quill-feathers white, edged with black on the outſide; tail very long, wedged. Length twenty-five inches; bill black, hardly curved; feathers on the chin long; tail very long, two middle feathers twenty, the reſt ſeven, inches long.—Paradiſea leucoptera, *Turton.*

The FURCATED PARADISE-BIRD.—In the late Leverian Muſeum. Black; under the wings a downy tuft; feathers in the middle of the belly like a forked tail, ſhining green. An incomplete ſpecimen.—Paradiſea furcata, *Turton.*

The WHITE PARADISE-BIRD.—Entirely white. There is a variety with the fore-part black; hind-part white. Inhabits the Papuan iſlands; very rare.—Paradiſea alba, *Gmel.* from *Pennant.*

TROGON, THE CURUCUI.

The curucuis are beautiful birds which naturaliſts have ſtated to inhabit the new world only; but Vaillant affirms that they are found in Africa and India, he having ſeen two ſpecies from the latter, and himſelf met with one in the former, country.

To the generic characters we have given in vol. iv. p. 421, Vaillant adds, that their noſtrils are round, and nearly covered by hairs proceeding from the forehead; the head is thick, the neck ſhort, the wings weak and pointed. At the nape there is a line of ſeparation between the head and neck, that is, a naked ſpace, but which cannot be perceived without parting the feathers or ſtretching the bird's neck. The thighs and legs are ſhort, and covered with feathers; the toes are diſpoſed two and two, the front ones

ones united at the baſe. Thick as theſe birds appear, they have but a ſmall body, but are very full-feathered about the ſternum and rump; the plumage of theſe parts is ſoft and cottony: yet the ſtems of all the feathers are very ſtiff, each ending in a ſmall ſpine; ſo that, if you rub your hand along the back againſt the grain as it is called, you feel the barbs like ſo many little pins.

Theſe birds are not only ſmall in proportion to their apparent ſize, but they are very lean, and ſeemingly very weak, with a dull, melancholy, ſtupid, air. Their ſkin is ſo tender, and the feathers ſo weakly fixed, that it is very difficult to prepare them for cabinets without tearing the ſkin and loſing much of the plumage. The tongue is ſhort, triangular, and ſtuck to the bottom of the throat: a few ſtiff hairs appear about the mouth. Theſe birds are ſeldom in motion but early in the morning and in the evening: they are very ſilent.

The CINEREOUS SHRIKE.— Prevailing colour cinereous, white ſtripes on the wings; belly tawny. The bill, legs, and claws, are of a duſky-aſh-colour; lower tail-coverts orange; tail blackiſh. Inhabits Cayenne; twelve inches and a half long.—Trogon ſtrigilatus, *Gmel.* Tr. Cayanenſis cinereus, *Briſſ.* Couroucou de la Guiane, *Buff.* Cinereous curucui, *Lath.*

The NARINA CURUCUI.—This African ſpecies has conſiderable reſemblance to the Red-bellied Curucui of America, deſcribed vol. iv. p. 421. Its colours are nearly the ſame; but the bird is ſomewhat leſs, though the tail is longer and more tapered. The female is ſmaller, and her colours not ſo bright; the young bird reſembles the adult female. This ſpecies inhabits the great woods of the Auteniquois country, thoſe about the Gamtoo-river, and in Caffraria. They neſtle in holes of trees; the laying is four eggs, nearly round, white, but tinged with red

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by their extraordinary tranſparency and delicacy. The incubation laſts twenty days; and the brood continues long together. Even in the love-ſeaſon, the note or cry of the male is but an expreſſion of melancholy; at other times he is ſilent. Though difficult to get at, ſays Vaillant, I found I could ſometimes bring them from their haunts by blowing againſt a leaf or upon the blade of a knife; ſo that at leaſt they have ſome curioſity. He does not think them capable of reſiſting the ſmalleſt bird of prey. For other particulars, we may refer to our account of the red-bellied curucui before quoted; but Vaillant has no heſitation in pronouncing the preſent a diſtinct ſpecies.—Couroucou narina, *Vaillant's African Birds*, N° 228, 9. *Narina*, in the Hottentot language, ſignifies "a flower."

The RUFOUS CURUCUI.—Prevailing colour rufous; belly, vent, and thighs, yellow; wing-coverts ſtriate black and green; quill and tips of the middle tail-feathers black. Quill-feathers edged with duſky; three outer tail-feathers each ſide tranſverſely ſtreaked with black and white, and tipped with white; legs duſky. Inhabits Cayenne; nine inches long.—Trogon rufus, *Gmel.* Couroucou à queue rouſſe de la Cayenne, *Buff.* Rufous curucui, *Lath.*

The SPOTTED CURUCUI.—Browniſh with duſky lines; crown green; edges of the wings and duſky tail with white lines; ſecondary quill-feathers and wing-coverts tipped with white. Bill brown. Inhabits Ceylon.—Trogon maculatus, *Gmel.* Spotted curucui, *Brown* and *Lath.*

The FASCIATED CURUCUI.—Back ruſty; beneath tawny-red; pectoral band white. Bill black, thick, a little bent and ſurrounded with briſtles; orbits naked, blue; irids yellow; head and neck black; tail-coverts grey; wing-coverts and ſhoulders undulate with white and black; quill-feathers and legs duſky; tail long, unequal, tipped with black. Inhabits Ceylon; ten inches

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and a half long; builds in high trees.—Trogon faſciatus, *Gmel.* Faſciated curucui, *Penn.* and *Lath.*

There is a variety,—Yellowiſh-brown, beneath yellowiſh-red; head blackiſh, neck and breaſt cinereous, wing-coverts ſtriate with white, tail black. Bill, legs, and ſpace round the eyes, blue; tail beneath yellow. —*Turton.*

The Asiatic Curucui. — Prevailing colour green; front, crown, and neck, red; chin blue with a red ſpot; quill and tail-feathers black. Inhabits India; nine inches long.—Trogon Aſiaticus, the blue-cheeked curucui, *Turton.*

The Indian Curucui.—Blackiſh, above ſpotted with ruſty; beneath yellowiſh barred with blackiſh; head black with with white ſtreaks; tail very long, barred. Bill blue; legs cinereous; from the angle of the mouth a longitudinal white band. Inhabits India.—Trogon Indicus, *Turton.*

The Grey Curucui. — This is the firſt ſpecies of a diſtinct genus of African birds formed by Vaillant, which he calls Echenilleurs, or caterpillar-eaters. It has very much the aſpect of a Lanius, or ſhrike; but, from the deſcription given by Vaillant, we have thought ourſelves better juſtified in placing it here.

Before we proceed to deſcribe particularly the preſent ſpecies, we muſt ſtate the remarks of Vaillant upon what he calls this new genus, moſt of which he ſays are really applicable to the Curucuis, a ſet of birds that have been hitherto very imperfectly deſcribed. The wings, when at reſt, reach a little beyond the ſetting-on of the tail, which has a very peculiar conformation; for, though forked in the middle, it is alſo inverſely tapered at the ſides; i. e. the two middle quills of the tail are ſhorter than thoſe next to them; the third is a little longer than the ſecond, and ſo on with the fourth and fifth; but the ſixth, or the outer feather on each ſide, is the ſhorteſt of all. The feet are ſtrong; tarſi rather ſhort for the

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ſize of the bird; the hinder toe flat at the baſe, and the three front toes united as far as the firſt joint; nails hooked and ſtrong; two outer toes of the ſame ſize. Theſe birds have in general no ſong; but a plaintive cry, ſo weak as to be ſcarcely audible. They live upon caterpillars only, which they ſeek for upon the higheſt trees; they are ſocial, the whole brood remaining together till the pairing ſeaſon. They are always extremely lean; they frequent woods and the darkeſt thickets; and are ſeldom ſeen in motion but early in the morning and in the evening. Such are nearly the habits of the curucuis in general.

We are now to ſpeak particularly of the preſent ſpecies, the grey curucui or caterpillar-eater. It appears to be as large as our thruſh, though the body is really not larger than the common lark; but this appearance it owes to the extraordinary fulneſs of the feathers. The bill and nails are ſhining black; the feet duller. The plumage of the male is in general ſlate-colour, darker on the head, back, and upper ſurface in general, than on the front of the neck and under parts. The large wing-feathers are brownish, delicately touched with white on their outer barbs; the wings are white underneath, the ſpace between the eye and bill is black, as well as round the mouth and part of the forehead. The tail is very broad, a little forked, and tapered, as explained before. The female is rather ſmaller than the male; but has none of the black between the eye and bill, round the mouth, &c. her two lateral tail-quills are fringed with white. Both have blackiſh eyes.

Vaillant obſerved theſe birds only in the Auteniquois foreſts, and on the borders of the Sondag and Swarte-kop; they were always perched on the higheſt trees, and ſeven or eight in company. Their cry is feeble and long, *lee-it*, hardly audible; they make ſhort but nimble flights. Their plumage is ſo full and looſe, that the gun generally knocks off a great

deal of it, and ſome is loſt in falling from the branches of trees after they are ſhot; and their ſkin is ſo delicate, that it is very difficult to draw it off without tearing. Theſe birds, being always lean, are very indifferent food.

The teſticles of the male are very ſmall, even in the love-ſeaſon; and have the peculiarity of being black, a thing ſo extraordinary among birds, that Vaillant ſays he has noted it in two ſpecies only. Vaillant was not able to procure a neſt; he ſuppoſes they may build at the tops of very high trees, out of ſight, or that poſſibly they may not build and lay their eggs in the canton where he met with them. The ſtomach is very large and muſcular; Vaillant ſays he opened a hundred and ſeventy of them, but never found any other food than caterpillars.—Echenilleur gris, *Vaillant's African Birds*, N° 162, 163.

The Yellow Curucui.—Reſembles the preceding, but is ſmaller, and the bill in particular is much ſmaller in proportion, though of the ſame ſhape preciſely. The bill, feet, and nails, are brown. The top of the head and back of the neck are faint olive-green, exhibiting ſome tints of grey which are more evident on the rump, and yellowiſh on the ſcapulars; the mantle, back, and upper tail-coverts, eſpecially the latter, beſides grey and green, have ſome lines of black acroſs the feathers. Similar black lines on a brown ground, tinted with yellow, form ſcollops or mottled work on the throat, neck, flanks, and under the tail, where the yellow becomes brighter and leſs mixed. The wing-coverts are brown, liſted with yellow, the yellow increaſing in breadth towards the back; the inner barbs of the wing-quills are yellow, ſo that moſt of the under part of them is of that colour. The three outer quills of the tail are partly black edged with jonquil-yellow; the yellow decreaſes on the intermediate quills; thoſe next to them are olive-brown, and the mid-quills olive-green, ſo that

that the tail appears olive above, yellow beneath.—Echenilleur jaune, *Vaillant*, N° 164.

The Black Curucui.—This is ſtill ſmaller than the preceding. The plumage is of a very ſhining black, aſſuming the green and blue gloſs common in ſuch plumage when expoſed to different lights. The inner barbs of the wing-quills are however olive-green, ſo that their whole under part is of that colour. The bill, feet, and nails, are black; the iris blackiſh-brown. This ſpecies was diſcovered in the foreſts on the eaſtern coaſt of Africa, but more abundantly on the borders of the Gamtoo-river than elſewhere. The female is leſs than the male, and her black not ſo gloſſy. Vaillant was not able to procure either neſt or eggs; and he is inclined to think theſe three ſpecies to be only paſſengers along the eaſt coaſt of Africa, and that they breed elſewhere.—Echenilleur noir, *Vaillant*, N° 165.

BUCCO, the BARBET.

The Pied Barbet.—Specific character, prevailing colour black; ſpot on the ſhoulders, ſtreak behind the eyes, tail at the tip and underneath, white. Bill large, bifid at the tip; front a little white; chin and ſides of the neck white; legs duſky. Inhabits Cayenne; five inches long.—Bucco melanoleucos, *Gmel.* Tamatia noir et blanc, *Buff.* Plus petit barbu à poitrine noire de Cayenne, *Buff. Pl.* Leſſer pied barbet, *Latham.* Pied barbet, *Ency. Lond.*

The Buff-faced Barbet.—Specific character, prevailing colour olive, quill-feathers and tail duſky; face and chin tawnyiſh-brown. Length ſix inches; bill pale; legs and claws yellow.—Bucco Lathami, *Gmel.* Buff-faced barbet, *Lath.*

The White-breasted Barbet.—Brown; breaſt with a large triangular white ſpot. Bill browniſh-black, yellow at the baſe; tail wedged. Inhabits Cay-

enne; ſize of a lark.—Bucco fuſcus, *Gmel.* White-breaſted barbet, *Latham.*

The Red-crowned Barbet.—Crown and chin ſcarlet; back, wing-coverts, and tail, green; belly white; breaſt yellow, tranſverſely ſtreaked with black and red. Bill duſky; above each eye a black line reaching to the cheek; above the ſhoulders on each ſide a large whitiſh ſpace; outer tail-feathers duſky; legs reddiſh. Inhabits Ceylon; five inches and a half long.—Bucco rubricapillus, *Gmel.* Red-crowned barbet, *Brown* and *Latham.*

The Indian Barbet.—Green; beneath white ſtreaked with green; head black; front and throat red; cheeks, chin, and ſpot on the breaſt, yellow. Inhabits India: reſembles the laſt in ſize.—Bucco Indicus, *Turton.*

The Wax-billed Barbet.—Black; beneath cinereous; bill carmine; tail rounded. Inhabits Cayenne; eleven inches and a half long.—Bucco cinereus, *Gmel.* Wax-billed barbet, *Latham.*

Gerin's Barbet.—Rufous; breaſt whitiſh; head, upper part of the back, wings, and tail, blue; ſpot on the crown, chin, and throat, black.—Bucco Gerini, *Turton.*

CUCULUS, the CUCKOO.

WE have ſtated, vol. iv. p. 438, the common reaſons, as aſſigned by Buffon, why the cuckoo lays its eggs in the neſts of other birds. Theſe are directly contradicted by Vaillant. He denies that they moult later than other birds; their moulting commonly begins about the 16th of July, as in the generality of European birds. That their moulting is more complete than in other birds, ſo as to loſe all their feathers before they acquire new ones, and thus become weak and helpleſs, he alſo denies, as well as that they are in a weak and imperfect ſtate when they firſt arrive: "As I have always been anxious (ſays he) to acquire

birds

birds in their moſt perfect ſtate, I avail myſelf of the firſt moment of their arrival, to catch or ſhoot cuckoos as well as other birds. I adviſe collectors for cabinets to do the ſame; for they will find that birds never undertake their migrations at the time of moulting, ſince they have occaſion for all their natural ſtrength to undertake the long journeys which are to bring them to their deſtined ſettlement.

"It is calumniating the cuckoos (he proceeds) to ſay that they are cold and indifferent in their amours. They are on the contrary very ardent; and I ſhould rather conclude, that it may be on that very account, namely, becauſe they are very prolific, and very much given to the pleaſures of love, that they diſpenſe with the cares of building and ſitting. And I will add, that their great ardour in the act of generation, and their conſtant appetite for it, may render them unfit for domeſtic cares, and eſpecially for incubation, their blood being perhaps too hot; for it is well known, that the hatching of eggs requires a moderate and equal warmth; and it often happens that hens and turkey-hens, by ſitting with too much eagerneſs, become ſo much heated as to ſuffocate the chickens in their eggs. This is called *burning the brood*. The above, which is only given as a conjecture upon the cauſe why cuckoos do not hatch their own eggs, has at leaſt the advantage of being deduced from facts, while Buffon's opinion is founded upon abſolute error. Buffon informs us, that the male cuckoo has a habit of eating the eggs of birds; and aſſigns that as a reaſon why the female is obliged to conceal her's, and not to lay two in the ſame place. But it is well known that the pies, the crows, the owls, and all birds of prey, eat the eggs of other birds; yet theſe birds all build neſts, and hatch eggs without any hindrance from the male." The cuckoo lays eight or ten eggs, but only one in each neſt. Vaillant affirms, that the young cuckoos, when they are able

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to leave the neſt of thoſe that have brought them up, join their parents, and receive from them the completion of their education. This he ſays, he has often verified, both in Europe and in Africa.

The food of the cuckoo is inſects, eſpecially caterpillars, and particularly the hairy ſort, which other birds moſtly reject. Thus nature ſeems to have deſtined cuckoos to deſtroy that kind of vermin which in our country does ſo much miſchief, and which ſcarcely any other birds will touch. Our common poultry ſometimes eat them, but are generally incommoded by it, becauſe they have not the faculty of returning, through the bill, the hairs of the caterpillars they ſwallow; but theſe hairs are formed in the ſtomach of the cuckoo into balls, and afterwards completely rejected by the mouth. The keſtrel and ſparrow-hawk, and many of the ſmaller birds of prey, which have a ſimilar faculty of rejecting what is offenſive to the ſtomach, feed oftentimes upon the hairy caterpillars, and would beneficially deſtroy great numbers of them, were it not that the great deſtroyer man is conſtantly labouring to extirpate theſe uſeful birds.

The African variety of the Common Cuckoo. — The common cuckoo of Africa is abſolutely the ſame ſpecies with the common cuckoo of Europe. Which is the original ſtock is not known; but the cuckoo really hatched in Africa, which therefore we call the *African variety*, may be readily diſtinguiſhed from that born in Europe. The upper plumage is greyer, with leſs brown; and the white ſpots on the tail-feathers are broader; the plumage of the thighs is not ſo full and long. In the young bird, the red colour is more prevalent than in the young of the European cuckoo; all the upper ſurface of the body is red ſhaded with brown and ſtriped with darker brown; the forehead, cheeks, throat, and neck, are rufous ſhaded with brown; the ſternum, flanks, and thighs, are

are reddiſh white, croſſed with brown lines; the under tail-coverts white; the bill and feet are light brown inclining to yellow. The eyes are brown in the young bird, yellow in the adult. This bird attains its full ſize in one year.—Coucou vulgaire d'Afrique, *Vaillant*, N° 199, 200.

The THICK-BILLED CUCKOO.—Specific character, the mandibles very large and ſtrong. This ſpecies is nearly the ſize of the common cuckoo. The tail is in ſome degree tapering, and as long as the body; and the wings when at reſt extend very little farther than the ſuperior coverts of the tail. The plumage is moſtly black, with a rich blue gloſs on the back, wings, and tail; the bill is of a greeniſh-yellow. The legs are ſtrong, ſhort, covered with broad yelloviſh-brown ſcales. In the female, the throat, breaſt, and under ſurface, are brown rather than black; and there is leſs of the blue gloſs on the upper ſurface. Vaillant met with this ſpecies on the banks of the Fiſh River, beyond the country of the Great Namaquois. It inhabits India alſo, as Mr. Raye of Amſterdam has one in his cabinet which came from Bengal.—Coucou à gros bec, *Vaillant*, N° 214.

The CRYING CUCKOO.—This is an African ſpecies added by Vaillant. Its voice is ſo ſtrong and piercing as to be heard at a vaſt diſtance. Perched on the top of a dead tree, or on a dried branch of a very high one, (for moſt birds that ſing are fond of being quite expoſed during their chant,) at break of day it begins its melancholy ſong, or rather its lamentable cries, which it continues till the morning is pretty far advanced; it reſumes as the day declines, continues a great part of the night, ſometimes the whole night when the weather is calm and ſerene. The ſyllables *ha-houa-ach*, of which the firſt is the key-note, the ſecond the 3d, and the third the 5th, though ſometimes ſtretched to the octave, form the whole extent of the ſong; the ſecond note is commonly

monly four times the length of the firſt; the third is dwelt upon according to the ſtrength of the bird, and may be heard at the diſtance of half a league if the wind be favourable.

Vaillant firſt met with this ſpecies on the borders of the Groote-vis. They were plentiful in that country; and, it being the ſeaſon of laying, he diſcovered ſeveral neſts containing a cuckoo's egg; and among others the neſt of the African warbler, Motacilla Africana, in which the female was ſitting on a cuckoo's egg; a moſt extraordinary diſcovery, for the neſt of that bird is ſo very ſmall at the entrance, being made in the ſhape of an egg with the ſmall end uppermoſt, that a bird of one third the ſize of a cuckoo could not have entered to lay an egg; neither was the neſt at all damaged. This was a matter therefore deſerving of enquiry, and Vaillant was not wanting in endeavours to unravel the myſtery. It is pretty well known, that the neſts in which the egg of the cuckoo is found are in general very ſmall, and often fixed to ſuch ſlender twigs, that it would be impoſſible for ſo large a bird to fix herſelf in or upon the neſt ſo as to lay an egg; ſome therefore have ſuppoſed the cuckoo to lay herſelf upon a branch juſt over the neſt, and ſo drop in her egg: but this is alſo frequently impoſſible, from the poſition of many of thoſe neſts, in which however the egg of the largeſt cuckoo has been found; as in that of the pincpinc, which is not open at top, but has only a long narrow aperture at the ſide. From theſe premiſes, Vaillant was led to conſider, that, as the cuckoo lays very ſmall eggs in proportion to her ſize, and has a very large mouth, this bird might very poſſibly lay her egg in any convenient place, and then, either in her mouth or in her claws, bear it to the neſt they thought moſt proper. He therefore ſet about trying the eggs of cuckoos by fixing them in the claws and in the mouths of the birds he had killed, being careful to match the

egg

egg with the ſpecies of cuckoo it belonged to; and he found, that the egg might be held very well in the claw, but ſtill better in the mouth, and without hindering the mandibles from ſhutting. He made the trials upon other birds with their own eggs; but the reſult was not ſimilar.

He was then very deſirous to aſcertain, by which of theſe modes, the feet or the bill, the cuckoo did really tranſport her egg; and he acknowledges, that a matter which to many perſons would appear trifling, occupied his imagination for a conſiderable time, and with no ſmall degree of anxiety. From the neceſſity of perching near the neſt where the egg was to be depoſited, he thought the foot not ſo likely to carry it, eſpecially as the legs are very ſhort, ſo that one foot could not be ſtretched out to any diſtance while the bird reſted upon the other. He recollected alſo, that he had once ſeen a couple of goatſuckers, as they are called, carry away their eggs in their mouths; therefore he was inclined to think that muſt be the mode. He ſet all his people to watch the cuckoos as they made toward the neſts of ſmall birds, and he poſted himſelf for whole days together in ſight of ſome neſt of a particular kind which he knew that cuckoos did make uſe of; but all in vain, till chance ſolved the problem.

Here Vaillant breaks off in the following words: "Reader, ſuſpend thy curioſity, and let us proceed in regular order. It coſt me many a weary ſtep and long watching to arrive at the truth. Have patience, therefore, till I come to that beautiful ſpecies, upon the occaſion of which I made a diſcovery which I prize greatly beyond what thou perhaps wilt rate it at.—Proceed we then, for the preſent, with the ſubject of this article, the crying cuckoo."

It is ſomewhat leſs than the European cuckoo; the plumage generally black, with a blue gloſs on the upper ſurface. The tail is a little tapered, and tipped

with white; the wing-quills incline to brown at their edges and tips. The bill is black; the legs yellowiſh; the eyes dark cheſnut.

The female is very nearly as large as the male; and only differs a little in the under plumage; from the throat to the covering of the thighs (which in both ſexes hangs down tufted upon the legs,) the feathers are a little tinged with red upon a delicate light-black ground. The young birds, both male and female, have the under plumage tranſverſely ſtriped with red; and thoſe parts which in the adult are black, in the young bird, both male and female, are brown red; and the tips of the tail-feathers are rufous-brown in the young birds; the bill brown, legs yellowiſh.

This ſpecies is very plentiful in Caffraria, and in all the inland parts towards Sondag, Swarte-kop, and Camdeboo; but not near the Cape, nor in the Auteniquois country, where indeed Vaillant ſays he never met with a cuckoo of any kind; but he obſerves, with regard to this latter country, that, as all the cuckoos are migratory, and quit their uſual haunts in the rainy ſeaſon, which was the time when he traverſed the country of the Auteniquois, ſome ſpecies of cuckoos might be there at other times, ſince that country abounds in trees which nouriſh the inſects and caterpillars the cuckoos ſo commonly feed upon.—Coucou criard, *Vaillant's African Birds*, N° 204, 205.

The Solitary Cuckoo.—This might be taken for a croſs-breed between the common cuckoo and the crying cuckoo juſt deſcribed; but we know that ſuch productions are ſeldom fruitful. At any rate, the preſent is a permanent diſtinct ſpecies, partaking of the colours and of the ſong of the two we have mentioned.

Of this ſpecies ſeldom more than a ſingle pair is found within a certain diſtrict, though other ſpecies of cuckoos may inhabit within the ſame limits. The cry

of

of the male is plaintive and lamentable, and may be very exactly expreſſed by the ſyllables *cou-a-ach;* the firſt note very low, but full; the ſecond three tones above, and ſtrongly dwelt upon; the third an octave above the ſecond, and this is ſuſtained as long as the breath laſts. The female has at certain times a kind of cooing note.

In ſize this bird holds a middle place between the common and the crying cuckoo. The plumage is browniſh-black with a grey gloſs on the head and all the upper ſurface. The tail tapers as in the preceding, and is tipped with white, and has ſome ſpots of the ſame colour along the ſtems of the four lateral feathers, and on each ſide of their outer barbs. The large wing-feathers and the tail are of a darker colour than the reſt of the plumage. The throat is pale rufous, with ſome clouds of brown on the lower part; from the breaſt to the belly and the tufted plumage of the thighs, the feathers pale rufous barred with brown; while the lower belly and under tail-coverts are of a whitiſh red without ſpots. The eyes are brown, eyelids yellow; the legs, feet, inſide of the mouth, and tongue, are yellow alſo; the bill very dark brown, but inclining to yellow at the baſe of the lower mandible.

The female differs in having the whole of the under plumage red barred or ſcollopped with brown, and leſs white in the tail. The young birds are of a very red brown on the upper ſurface; light red underneath, with bars of a darker hue. This deſcription of the young bird agrees pretty well with Buffon's Cape cuckoo; (vol. iv. 478, of this work;) and Vaillant ſuppoſes it to be the ſame, and that Buffon miſtook the young bird for a diſtinct ſpecies, which is very eaſily done by perſons unacquainted with the different appearances of the plumage after each moult.

The ſolitary cuckoo haunts the interior parts of

Caffraria to the borders of the Camdeboo. The eggs, which are dropped in the nests of warblers and thrushes, are reddish spotted with light brown: the time of hatching is from nineteen to three-and-twenty days, according to circumstances.—Coucou solitaire, *Vaillant*, N° 206.

The EDOLIO, or CRESTED CAPE CUCKOO.—This is the only species Vaillant met with about the Cape of Good Hope. It expresses the syllables *e-do-lio*, which form its name, dwelling on each in a plaintive manner. It is called also new-year's bird, *niuwe-jaars-voogel*, under which name strange stories are related about it; such as, that it is never seen but about new-year's day; and that, when hungry, it emits a cry which brings all the little birds together to feed it. This fable must have arisen from the following circumstance: as the edolio, like the rest of the cuckoos, leaves her young to be reared by smaller birds, some of the colonists may have seen a young one perched outside the nest, and crying for food, and presently after the little birds belonging to the nest coming to feed it. There is nothing remarkable in this having been observed about new-year's day, since about that time the young birds in southern Africa are ready to take wing; the business of pairing, incubation, &c. being generally performed during the months of November, December, and January, which are the hottest part of the year. But the inhabitants of the Cape will by no means allow that their new-year's bird is the young of the edolio, but a full-grown bird, a distinct species, coming from they know not where.

At the Cape the edolio is met with in the environs of Ronde-Bosch, Niuwe-Land, and Constance, and throughout the valley which divides False Bay from Table Bay; it has also been met with often about Swellendam, and thence to and beyond Duywenhock; and most probably it is pretty general throughout the whole south of Africa from the month of

August

CUCULUS

J. Pass sc.

1. The crested Cape Cuckoo. 2. The Coromandel Cuckoo.

London, Published as the Act directs, May 28th 1808, by J. Wilkes.

Auguſt till February, the only period during which thoſe birds which come to neſtle in that country are to be ſeen; for in February and March they depart.

This bird is about the ſize of the crying cuckoo. It is of a ſlender form; the tail tapering, and as long as the body. A creſt of long narrow feathers ornaments the back part of the head. The plumage is black, excepting a patch of white on the wings; on the wings and tail the black aſſumes a tint of dark green. The bill is black, feet brown, eyes orange-colour.

The female is rather ſmaller, and the whole of her under plumage is white inſtead of black; the tips of the tail-feathers are white alſo; the reſt of her plumage is black, but without the green tint. She has, like the male, the tuft, and the white ſpot on the wings. Vaillant obſerves that this *female* is Buffon's Jacobin de Coromandel, the C. melanoleucos of Gmelin. See vol. iv. p. 481, of this work.

The young birds, male and female, have the throat and front of the neck dirty white, the reſt of the under parts grey, the ends of the tail-feathers pale red; thoſe parts which are afterwards to be black are at this time of a browniſh black, and the white patch on the wings ſmaller and leſs diſtinct.

The eggs are white without any ſpot whatever; ſix lines long, and four thick; they were found in the neſts of warblers, flycatchers, &c. all inſect-eating birds.—Coucou à plaque dentelé aux ailes, *Sonnini*. Edolio, *Vaillant*, N° 207. This bird is delineated on the annexed Plate, at fig. 1. Fig. 2 is the Coromandel Cuckoo, for the deſcription of which ſee vol. iv. p. 485.

A variety of the edolio is deſcribed by Vaillant from a ſpecimen in the cabinet of M. Temminck of Amſterdam.—It was killed in the higher parts of Africa, i. e. near the equinoxial line; and, though not obſerved by Vaillant in his travels in that country,

try, he has no doubt it is to be referred to this ſpecies. It has the creſt, the white ſpot on the wings, and the upper plumage green black; but varies in the following particulars: On the throat and front of the neck appear longitudinal ſtreaks of green-black on a white ground; the reſt of the under plumage, from the breaſt to the under coverts of the tail, is white. The tail tapering, and very long; green black, with a large ſpot of white at the end of each feather. From the latter part of the deſcription it will appear probable that this variety was a female; yet it was much larger, exceeding even the European cuckoo in ſize; the tail was large, and longer than the body. There was more of the green likewiſe upon the back and tail, in which it rather reſembles the male. Perhaps it may be the female of a diſtinct ſpecies of which the male is entirely black.

The SERRATED CUCKOO. — Specific character, plumage black, with a white ſerrate ſpot on the wings; twelve inches and a half long; tail longer than the body; plumage of the thighs lax; legs black. Inhabits the Cape of Good Hope. — Cuculus ſerratus, *Gmel.* C. niger, *Sparrmann.* Creſted black cuckoo, *Turton.* Serrated cuckoo, *Ency. Lond.*

The BENGAL CUCKOO.—Specific character, ferruginous with white lines, beneath yelloviſh-brown; tail wedge-ſhaped. Size ſomewhat larger than a lark: bill duſky; head, neck, back, and wing-coverts, ferruginous, marked with ſhort lines of white, bounded by black, pointing downwards; belly yelloviſh-brown; the firſt and ſecond of the prime quills plain reddiſh-brown; the reſt barred with black. Tail very long; outer feathers duſky, with brown tips; the others marked with bars of black and brown. Legs black; the inner hind toe has a long ſtraight claw like a lark. Inhabits Bengal.—Cuculus Bengalenſis, *Gmel.* Lark-heeled cuckoo, *Brown* and *Latham.* Bengal cuckoo, *Ency. Lond.*

The

The PUNCTATED CUCKOO. — Specific character, tail wedged; body brown, the tips of the feathers ſomewhat rufous, beneath dirty white. Length nine inches. Bill bent, and of a black colour; head, neck, and upper parts of the body, brown and gloſſy; every feather marked with a pale rufous ſpot at the tip. Wings and tail brown, but darker than the reſt, and the feathers ſpotted at the tips like the others; belly and vent dirty white; legs brown. Inhabits Cayenne.— Cuculus punctulatus, *Gmel.* Punctated cuckoo, *Lath.*

The CRESTED BLACK CUCKOO.—Specific character, tail wedged; body ſhining black; head creſted; firſt five quill-feathers white at the baſe. Length twelve inches and a half. Bill much curved, and black. The feathers of the head are an inch in length, forming a creſt. General colour of the plumage gloſſy black, except the baſe of the four or five firſt quills, which are white, and form a ſpot on the outer edge of the wing. The thigh-feathers are long, and hang over the legs, which are black. Inhabits the Cape of Good Hope. It is probably only a variety of the Serrated Cuckoo.—Cuculus ater, *Gmel.* Creſted black cuckoo, *Latham.*

The CAFFRE CUCKOO.— This ſpecies inhabits Caffraria, frequenting only the large foreſts. They perch on the low branches of trees, and the male utters, with a plaintive tone, the ſyllables *côoo-ro*, ten times ſucceſſively, but always in the ſame tone. He is generally accompanied by his female, who does not ſing, but utters a haſty cry of *cree-cree-cree*, very ſimilar to the merlin as it hovers in the air; this ſeems to be the call, for the male uſes it when his female is away, and when he apprehends danger to himſelf. The female lays four eggs of a chalky whiteneſs, upon which ſhe and the male ſit alternately.

Size of the thruſh; tail ſlightly tapered, as long as the body. The bill, feet, and the whole plumage, abſolutely

abſolutely black; eyes maroon-colour. The female ſomewhat leſs, and inclining to brown on the belly. This ſpecies feeds upon inſects.—Coucal nègre, *Vaillant*, N° 222.

The YELLOW-HEADED CUCKOO.—Plumage on the head yellow; ſhoulders lead-colour; quill-feathers black; tail yellowiſh-brown, with numerous black bars; lower part of the back pale brown; rump ſtraw-colour; breaſt and upper part of the belly cinereous waved with brown.—Cuculus chryſocephalus, *Turton*, from *Cim. Phyſ.* tab. 48.

The RED-HEADED CUCKOO.—Specific character, bill ſtrong, arched; noſtrils even with the edges of the upper mandible, which is very thick; round the eyes bare of feathers, but furniſhed with papillæ like nap or velvet; head large.

This ſpecies was firſt deſcribed by Forſter, and ſucceeding naturaliſts have placed it in this genus. It inhabits the iſland of Ceylon, where it is called *malkoha*. It feeds on fruits, which occaſioned Sonnini to obſerve, that it could not belong to the cuckoos. Vaillant is of the ſame opinion, and has mentioned ſeveral other particulars wherein it differs from the cuckoos; theſe we have collected into the ſpecific character, though Vaillant makes them generic, and places this and the next in a diſtinct genus which he calls the Malkohas.

The preſent ſpecies is about the ſize of the common cuckoo of Europe; but has a longer and more ſlender appearance, from the tail, which is much fringed, being nearly as long as all the reſt of the bird, and three-quarters longer than the wings as they lie at reſt. The top of the head, hind head, and neck, are of a greeniſh black, with a line of white the whole length of each feather; and, as the feathers are very ſmall, the white lines are numerous. The lower part of the cheeks, and front of the neck, dull green or black. The green-black of the top of the head becomes

comes more decidedly green on the back, wings, and tail; and has a gloſſy appearance in the ſun, but in the ſhade the whole looks black. The tail is tapered, fringed with white at the end; the under parts are white.

The bald part, which includes the eyes and the greateſt part of the cheeks, and from which the bird takes the name of red-headed, "was indeed of an orange-colour," ſays Vaillant, "in all the ſpecimens I examined before they had undergone any preparation; but in the cabinets of curious gentlemen, who are in the habit of painting the bald parts of animals according to their own fancies, I have ſeen this part made ſometimes red, ſometimes yellow, and even ſometimes blue. In Sonnini's deſcription, from Foſter, mention is made of a kind of cap as red as fire covering the head; but this is very erroneous; for the bald or red part does not reach the top of the head," nor go round the hind head or neck, but is merely a large patch upon each cheek; ſo that, *bald-cheeked* would have been a more proper deſignation than *red-headed*. The bill is olive-green at the baſe, and yellowiſh towards the point, as well as the under part of the lower mandible. The ſcales on the feet are yellowiſh on a brown ground, the nails brown. Colour of the eyes not known, as Vaillant deſcribed the ſpecies from dead ſpecimens only, which are very common in the cabinets of Holland. He met with ſome individuals which were ſmaller, of duller colours, and the under parts reddiſh inſtead of white: theſe he ſuppoſes to have been females.—Cuculus pyrrhocephalus, *Gmelin's Linn.* Red-headed cuckoo, *Lath.* Malkoha, *Forſter*, and *Vaillant*, N° 224.

The ſecond ſpecies placed by Vaillant in his genus of Malkohas, we can only conſider as a variety; for it agrees in all the particulars we have collected as the ſpecific characters, but varies in colour. The

bald ſpace round the eyes occupies a ſmaller part of the cheeks; and in the ſpecimen examined by Vaillant this part was painted red, but he does not affirm that to have been the natural colour. This bird is larger than the preceding; the tail-feathers are more unequal, and pointed, not rounded, at the ends. The head, and the cheeks (the naked or red part excepted), are of a bluiſh grey; the back of the neck, mantle, and ſcapulars, are dark green, but mixed with blue on the wings and tail, and gloſſy in certain poſitions of the light. The throat, neck, breaſt, belly, and all the under part, are of a dirty red, as are the ends of the tail-feathers. Deſcribed from the cabinet of Mr. Temeninck, of Amſterdam; it is a very handſome ſpecies.—Malkoha rouverdin, *Vaillant*, N°. 225.

The Cupreous Cuckoo.—Specific character, general caſt of the plumage golden copper; belly and thighs yellow. The tail is wedge-ſhaped, and one or two of the outſide feathers has a triangular ſpot at the extremity. Bill and legs black. Size of a lark. Inhabits Africa.—Cuculus cupreus, *Turton*.

The Small Honey-Cuckoo.—This and the large honey-cuckoo, deſcribed vol. iv. p. 486, are made a diſtinct genus by Vaillant under the name of *Indicateur*. He examines what has been written by Sparrman concerning theſe birds, which, when diveſted of the marvellous, will be found to contain ſome facts. It is true, he ſays, that the Hottentots follow this bird, and by its means diſcover ſwarms of bees, and honey; which they eaſily do, becauſe the bird is very noiſy. Its cry he generally found to be like the ſyllables *ket-ket-ket-ket-ket*, *kye-ket*, *kye-kye-ket*. Sparrman deſcribes the note by *chirs-chirs*; other ſay it is *wicki wicki*, adding that *wicki* ſignifies honey in the Hottentot language; but Vaillant denies this. He ridicules the idea of the indicator endeavouring to lead men to diſcover the honey, and

and open the hives for them; for certainly that would be the way to make the birds die of hunger: it muſt be mere accident, and contrary to their wiſhes, when this happens. In fact the bird is only known by hearſay at the Cape, becauſe it moſtly inhabits the interior, and is very imperfectly deſcribed by Sparrman, who, ſays Vaillant, probably never ſaw it in his life. The account is alſo ſeverely criticiſed by Mr. Bruce: "I cannot (ſays he), for my own part, conceive, in a country where there are ſo many thouſand hives, that there was any uſe for giving to a bird a peculiar inſtinct or faculty of diſcovering honey, when, at the ſame time, nature had deprived him of the power of availing himſelf of any advantage from the diſcovery; for man ſeems in this caſe to be made for the ſervice of the bird, which is very different from the common and ordinary courſe of things; man certainly needs him not, for on every tree, and on every hillock, he may ſee plenty of honey at his own deliberate diſpoſal. I cannot then but think, with all ſubmiſſion to theſe natural philoſophers, that the whole of this is an improbable fiction; nor did I ever hear a ſingle perſon in Abyſſinia ſuggeſt, that either this or any other bird had ſuch a property. Sparrman ſays it was not known to any inhabitant of the Cape, any more than it was in Abyſſinia; it was a ſecret of nature, hid from all but theſe two great men, (Lobo and Sparrman,) and I moſt willingly leave it among the catalogue of their particular diſcoveries."

The ſmall indicator is about ſix inches long. The bill is conical, pointed, and the upper mandible arched; the ends of the two mandibles meet in ſuch a manner as to give great ſtrength to the bill. The noſtrils are very high, but each ſunk in a very viſible indention, and moſtly covered with feathers. The head is ſmall, and the eyes not prominent. The body is long; and the ſkin is very thick, ſo as almoſt to bid defiance to the ſting of a bee; but the bees often

often ſting them in the eyes, and kill them. The legs are ſhort and ſtrong; the toes are diſpoſed two and two, thoſe in front being united, and the larger ones longer than the legs; the nails are ſtrong, and formed like thoſe of the pies and all thoſe birds which climb trees. The wings are long, full, and reach to the middle of the tail, which has twelve quills, and has the double character of being tapered at the ſides and forked in the middle.

Theſe birds inhabit woody diſtricts; they neſtle in the holes of trees, laying four white eggs on rotten wood. They feed on honey and wax, but the bees they do not eat. Bruce ſays they eat the bees, and not the honey. Their colours are nearly as follow: The top of the head grey, with a ſhade of olive-green; this colour, as it proceeds down the back of the neck, becomes olive-green inclining to yellow, which is the prevailing colour of the upper ſurface in general, namely, the back, wings, and tail. The great wing-quills are dark brown, the edges only being olive-green. Under each eye is a black mark, forming a kind of muſtachio. The under ſurface is moſtly olive-green inclining to grey; the belly is dirty white. In other reſpects it differs very little from the ſpecies already referred to in our fourth volume. It inhabits the mimoſa-trees in the foreſts of the Swart Kop, or Sondag, and thence as far as Camdeboo; and from the River of Elephants to the Great River. The coloniſts at the Cape, who are better acquainted with this ſpecies than with the other, call it *heuning-vogel*, or *heuning-wyſer*, "indicator of honey," which is a literal tranſlation of the Hottentot name.—Petit indicateur, *Vaillant*, N° 242. Moroc, or maroc, (from *mar*, honey,) *Bruce*.

M. Vaillant ſlightly notices a third ſpecies of indicator. It is of a medium ſize between the other two; top of the head, back, wings, and rump, brown; throat red; under parts rufous white; bill and feet brown.

The

The Gilded Cuckoo, male and female.

London, Published as the Act directs, Nov.r 7th 1807, by J. Wilkes.

The ROYAL CUCKOO.—Specific character, plumage black with a blue gloſs; quill-feathers crimſon; bill red, with a yellow front; back of the head purple. From the hind part of the mandibles, on each ſide, is a ſtripe of white, running towards the nape; legs brown. Inhabits the interior parts of Africa.—Cuculus regius, *Turton.*

The GREY-HEADED CUCKOO. — Body above brown-aſh; beneath white, barred with grey; tail wedge-ſhaped, the feathers black with duſky bars. Inhabits India; reſembles the radiated cuckoo, vol. iv. p. 480.—Cuculus poliocephalus, *Turton.*

SONNERAT'S CUCKOO. — Plumage ſtriated with black; above rufous brown, beneath white; tail-feathers ſpotted with black. Size of a blackbird; bill, irides, and legs, yellow. Inhabits India.—Cuculus Sonneratii, *Turton.*

The SILVER-COLOURED CUCKOO.—Plumage undulated with brown and black; rump ferruginous; bill, tips of the wings, and bands on the tail, black; beneath whitiſh, waved with black; legs yellow. Tail-feathers ruſty-brown, barred with black, tipt with white, and with a ſmall white terminal ſpot. Length thirteen inches and a half.—Cuculus hepaticus, *Turton.*

The GILDED CUCKOO.—The male of this ſpecies has been already deſcribed under the name of the Gold-green and White Cuckoo, vol. iv. p. 483. Vaillant calls it *didric*, from its note, and has given figures of both male and female, which we have copied to accompany his additional remarks.

This is the moſt numerous ſpecies in Africa; ſo numerous indeed, that Vaillant found, upon referring to his journal of obſervations, that he and his Hottentot ſervant Klaas had killed 210 males, 113 females, and 103 young ones, of that ſpecies only; and that they had found 83 eggs in as many different neſts of inſectivorous birds; "ſo that (ſays he) I think

think it will be allowed, that means of ſtudying the didric cuckoo have not been wanting to me. Yet, previous to my journeys in this country, though this bird is ſo common, (not indeed near the Cape, but about a hundred leagues from Cape Town,) it was hardly known in Europe; there being in the king's cabinet at Paris but one ſpecimen, and that mutilated, and very badly preſerved." (Yet we muſt obſerve, that our deſcription of the male, vol. iv. p. 483, copied from Buffon, agrees extremely well with Vaillant's.) "I brought over with me about a hundred and fifty, males, females, and young ones; ſo that now it may be met with in moſt of the cabinets of Europe." It was in examining one of this ſpecies, that Vaillant made the diſcovery which gave him ſo much pleaſure; namely, the mode in which the cuckoo conveys her eggs into the neſt of another bird. Having one day ſhot a female, he found inſide the mouth a complete egg, which from its ſize and whiteneſs he knew muſt belong to the bird herſelf. Tranſported at a diſcovery which confirmed the opinion he had previouſly formed, (ſee p. 225,) he called his man Klaas to ſhare in his ſatisfaction. The Hottentot told him, that he had often obſerved the female cuckoos he ſhot to drop an egg at the moment they fell; but he had always ſuppoſed that, in ſuch caſe, the unfortunate animal had been ready to *lay* an egg, and that the pangs of death had forced it from her. Vaillant then recollected that this man had often ſaid to him, when he brought him the birds he had ſhot, Here is a cuckoo who dropped an egg at the moment ſhe fell from the tree. Vaillant had now little doubt but the cuckoo laid her egg in ſome convenient place, and then carried it in her mouth to the neſt ſhe intended it ſhould be hatched in; but, in order to be ſtill more certain, he and his man ſet about killing as many of that ſpecies as they could meet with; but, though, as juſt obſerved,

obſerved, they killed no leſs than 113 females, yet they met with only one repetition of this incident, namely, of a female with an egg in her mouth. However, the fact ſeems eſtabliſhed.

The gilded cuckoo is one of the moſt beautiful birds that can be conceived. The ſize and colours of the male are pretty correctly deſcribed at vol. iv. p. 483. The female is nearly of the ſame ſize; but her colours differ in ſome degree: the white upon the throat, breaſt, wings, and tail, is in the female rufous; and the beautiful gold-green of the upper ſurface is in the female of a reddiſh or dun colour; and the white bars on the head are not ſo diſtinct. On the young birds theſe bars are ſcarcely to be diſcerned; the upper ſurface of their plumage is browniſh, the under light grey ſlightly inclining to rufous; and all the ſpots on their wings and tail are dark red; bill and feet yellowiſh brown, eyelids yellow, eyes grey.

This ſpecies was firſt met with by Vaillant on the borders of the *Klyne Vis Rivier*, or Little Fiſh River; thence quite to Caffraria; and, at his return, as far as Camdeboo. In his ſecond journey, he met with it for the firſt time, on the banks of the Elephant River, and thence to the country of the Little Namaquois. And in all theſe places the ſpecies was ſo plentiful, as before obſerved, that he could have ſhot thouſands. They are readily diſcovered by their note, as the male ſits for a conſiderable time on the top of a tree, drawing out the ſyllables *dee-dee-dee deedric;* (we write them according to the Engliſh pronunciation;) but the call of love is *deewee-deewee-deewee-deewic*, to which the female anſwers *wic-wic*. The eggs are of a ſhining white; they were always found in the neſt of ſmall inſect-eating birds, never in thoſe of the grain-eating birds, though the latter were more numerous, and more readily found; for in Africa the granivorous birds live in flocks, and a great

great many neſts are to be ſeen collected in one place. —Cuculus auratus, *Gmel.* Coucou vert-doré et blanc, *Buff.* Gilded cuckoo, *Lath.* Didric, *Vaillant*, N° 210, 211.

Klaas's Cuckoo.—So named by Vaillant from his favourite Hottentot ſervant, who brought him the ſpecies here deſcribed. It is about the ſize of the preceding; but the bill is ſmaller and more curved; neither is the tail ſo broad, the barbs of the quills not being ſo long and full; but the wings are longer. The colour of the top of the head, neck, mantle, wing-coverts, rump, and tail-coverts, are of a ſhining cupreous green; the eye-brows are white. The primary quills are bronzed green outwardly, and blackiſh ſpotted with white beneath. The throat, front of the neck, breaſt, and all the under parts, are white, with a very few ſtripes of green on the lower belly and thighs. The four mid-quills of the tail are green, ſprinkled with cupreous red; the three outer ones are white, each with an oblong copper-colour patch near the end on the exterior part, but within appear ſome tranſverſe narrow lines very diſtant from each other. The bill and feet are black brown, the eyes yellow.—Coucou de Klaas, *Vaillant's African Birds*, N° 212.

The Shining Cuckoo.—Specific character, the upper part of the body green, with a rich gilded gloſs; the under parts white, tranſverſely waved with green and gold; the under tail-coverts almoſt white; quills and tail duſky-brown. Bill and legs bluiſh; irides hazel. Seven inches long. Inhabits New Zealand, where it is called *poopo-arowro*.—Cuculus lucidus, *Gmel.* Shining cuckoo, *Latham.*

The Large Cuckoo.—This new ſpecies is full thirty inches in length from the top of the head to the end of the tail; and its proportions are ſuch, that the head and neck, the body, and the tail, form three equal parts. The legs and feet are proportionate to theſe

theſe dimenſions, of great ſtrength, and covered with large ſcales; the inner hind toe is armed with a ſpur two inches long, and ſtrong in proportion. The wings reach to the end of the upper tail-coverts; the tail-feathers are tapered. The feathers on the head, neck, and breaſt, are thick, hard, and gliſtening at the ſides. The bill is ſtrong and thick at the baſe.

The upper ſurface is moſtly of a brown red ſhaded with olive, but the middle of every feather is marked with a line of reddiſh white, and barred with dark brown; the wing-quills are barred with brown-red and yellow-red alternately on their outer barbs; the tail-feathers are barred with reddiſh-grey on a dark brown ground, and tipped with dirty-white. The throat, front of the neck, and breaſt, are variegated with light fawn-colour and brown; the reſt of the under plumage is light fawn-colour with tranſverſe bars of blackiſh. The bill is brown; the legs, feet, and nails, blackiſh.

This, though deſcribed among Vaillant's *Oiſeaux d'Afrique,* is not an African ſpecies. It is from New Holland, in the cabinet of M. Temminck, of Amſterdam. There is another of the ſame ſpecies in the Muſeum of Natural Hiſtory at Paris, brought from New Holland by the perſons who accompanied Captain Baudin in his laſt expedition. The living bird not having been ſeen by Vaillant, he could not ſpeak of the colour of the eyes, nor of its habits and modes of living.—Coucal géant, *Vaillant,* N° 223.

The Dull Cuckoo.—Specific character, body reddiſh brown, creſt bifid, orange-colour; the two outer tail-feathers white, the reſt tipped with white. Inhabits the Eaſt Indies.—*Turton,* from *Cim. Phyſ.* 95.

The Tolou Cuckoo.—Bill brown; head, throat, hind part of the neck, and upper part of the back, covered with longiſh, narrow, ſtiff, feathers, of a blackiſh colour, with a rufous-white ſtripe down the

ſhaft; thoſe on the throat, fore part of the neck, and breaſt, the ſame, with a longitudinal ſtripe on each ſide. Lower part of the back, rump, belly, ſides, thighs, upper and lower tail-coverts, greeniſh black; ſcapulars, upper and under wing-coverts, fine cheſnut: ſhafts of them purpliſh; quills cheſnut, tipped with brown. Tail blackiſh green above, and black beneath. Legs black; the claw of the inner hind toe long and ſtraight, like that of a lark. Inhabits Madagaſcar, where it is called *tolou;* fourteen inches and a quarter long.—Cuculus tolu, *Gmel.* C. Madagaſcarienſis, *Briſſ.* Coucou de Madagaſcar appellé Tolou, *Buff.* Long-heeled cuckoo, *Lath.* Tolou cuckoo, *Ency. Lond.*

The Bronzed Cuckoo.—This ſpecies was not diſcovered by Vaillant himſelf, but is deſcribed by him from a well-preſerved ſpecimen in the cabinet of M. Temminck of Amſterdam. It was brought from the coaſt of Malimba, a higher latitude, or nearer to the equinoctial line, than was reached by Monſ. V. This bird is about the length of the common cuckoo, but of a more ſlender make. The bill differs from that of cuckoos in general; the upper mandible being very broad at the baſe, and receiving the lower into it. The upper ſurface is of a beautiful dark bronze colour, with fine ſhades of blue, green, and even grey, according as the rays of light fall upon it; the tail is as long as the body, tapered, every pair of feathers differing in length as they recede from the middle; the blue colour prevails moſt upon the tail and wings. The throat, neck, and moſt of the under ſurface, are grey with certain reflections of green; the bill is lemon-colour; the legs and feet black; the colour of the eyes could not be known.—Coucou gris bronzé, *Vaillant,* N° 215.

The Black-and-red Cuckoo. — This is an African ſpecies which Vaillant includes in a diviſion he calls *Coucous coucals,* which differ from the cuckoos, properly ſo called, in the length and ſtrength of

of their legs, length of their claws, ſhortneſs of their wings, length and ſtrength of their bills, and their narrow and lengthened noſtrils. The inner hind nail of each foot is ſtraight and long, as in the larks. The plumage of the upper parts is moſtly rough, but ſhining; they have ten feathers in the tail, and the wings are rounded. They feed on inſects, eſpecially graſshoppers, of which they deſtroy great numbers. They frequent woods, neſtle in holes of trees, *hatch their eggs themſelves, and bring up their young.* All the ſpecies have been hitherto placed among the cuckoos; and, among others, Vaillant mentions the C. Egypticus, (which he ſays is the ſame with the Senegalenſis and Braſilienſis,) as having theſe peculiarities.

The preſent ſpecies is named from the only colours which appear on its plumage. The bill is remarkably ſtrong, the legs ſtout, and the ſpurs in the male are near two inches long. It is about the ſize of a carrion-crow. The tail is very full, and almoſt as long as the body, and tapers at the ſides only, ſo that it becomes round when expanded. The wings, when folded to the body, reach very little beyond the upper tail-coverts. The wings of the head and neck are extremely rough, and their ſhining barbs look like ſo many pins ſticking out at the ſides. The prevailing colour is black; the upper wing-coverts are partly rufous, partly black; and the great wing-quills are entirely of a deep red except their tips, which are black. The bill, feet, and nails, are ſhining black; the eyes dark brown.

The female is one fourth leſs than the male; inſtead of black, the front of her body inclines to brown, and her ſpurs are full half an inch ſhorter. Vaillant killed at one ſhot a male and a female that had alighted among ſome crows who were feeding on the remains of a buffalo. He killed them before they had touched the carcaſe; and he does not con-

clude that they meant to feed on the fleſh, but rather on the worms they might find in it; on diſſecting them, he found nothing in their ſtomachs but the remains of inſects. He met with this ſpecies near the Swart or Black River.—Coucal noirou, *Vaillant*, N° 220.

The RED CUCKOO.—This bird is in general of a dull yellowiſh red. The wing-quills are brighter, each feather having a longitudinal ſtreak of fainter red inclining to white, and ſeveral tranſverſe ſtreaks or bars of black. The throat, front of the neck, and moſt of the under plumage, are very faint red, the middle of each feather taking a white tinge, which is alſo the ground-colour of the feathers of the lower belly and under tail-coverts; but theſe are alſo tranſverſely barred with lines of a browner ſhade. The bill, legs, and claws, are yellowiſh brown; the eyes dark red.

The tail is tapered, and full as long as the whole bird from the beak to the rump: taken together, the length is eleven inches and a half. The wings reach but little beyond the origin of the tail. The ſpurs are ſtraight out, and about an inch long. The female is ſomewhat leſs than the male, and her ſpurs about one third ſhorter. This ſpecies hatches its own eggs, in the holes of trees. Diſcovered by Vaillant on the ſhores of the Groot Vis River; he never heard it utter any cry or note whatever.—Coucal rufin, *Vaillant*, N° 221.

PICUS THE WOODPECKER.

The woodpeckers of Africa agree in manners and habits with thoſe of America; we may therefore refer, for the general account of them, to what we have already ſaid in vol. iv. p. 505-512. The following additional obſervations are from Vaillant.

Theſe birds live moſtly in foreſts, preferring the largeſt, the oldeſt, and moſt lofty, trees; for among rotten

rotten wood they find both lodging and food. They are an emblem of laborious man, being ſtationary and, moſtly, ſolitary; we ſay *moſtly*, becauſe one ſpecies is known to be gregarious; and accordingly that ſpecies differs in ſome other reſpects from its congeners.

We have ſaid, p. 509, that the woodpecker "forms its neſt in the heart of ſome worm-eaten tree." It does indeed take up its lodging in thoſe ſituations, but neſt it makes none. Like the labouring hind, the male, female, and all the young, collect in their humble and obſcure lodging at eve, and at break of day they ſeparate, each to its laborious taſk of providing ſubſiſtence for the day. It is a common opinion that the woodpeckers do much injury to trees, (ſee vol. iv. p. 509.) but the fact is, that, by deſtroying the inſects and larvæ that gnaw the ſound wood, they do a great ſervice to the owners of trees; for they do not attack ſound wood, but only follow the perforations made by inſects. Yet Buffon talks of a buſhel of duſt and chips being found under a tree! and he quotes M. Deſlandes, who acquaints us, that they uſe their tongue, like an auger, to bore the hardeſt wood! See vol. iv. p. 524. Hence theſe harmleſs, laborious, uſeful, creatures, by Providence deſigned to prevent the monſtrous increaſe of deſtructive inſects, have been themſelves proſcribed in many countries, and thouſands of them killed. We ſhould ever be cautious not to deſtroy life, which we cannot reſtore, without good and ſufficient reaſons.

The woodpeckers are in general climbers; but there are ſeveral ſpecies which do not climb, and ſome which from the form of the tail probably cannot. Thus then they may be claſſed in two diviſions, thoſe which climb, and thoſe which do not. The climbers may be known by the ſhape of the tail, for upon that the faculty of climbing chiefly, Vaillant ſays entirely (uniquement), depends. The climbers have the

the tail tapering, that is, the feathers decreaſing in length from ths middle; and the ends of the quills form ſo many points of reſt at different heights; theſe quills have the elaſticity of whalebone, and are naturally curved, ſo as to catch any inequality in the wood or bark, and thus give the bird a jerk or ſpring upwards; the barbs alſo of the tail-quills ſtand apart at the ends, and are very ſtiff, thus greatly increaſing the number of points of ſupport. It is to be obſerved, however, that not all the ſpecies thus furniſhed for climbing are really climbers. Many other genera of birds have the tail and feet formed in the manner of the woodpeckers; the only mark peculiar to them, and which ought to be expreſſed in the generic character, is that "the tip of the tongue is furniſhed with ſmall hooks bent back like a harpoon." The length and other qualities of the tongue are not peculiar to this genus, and it is of great importance to know what are really generic characters.

The plumage of the woodpeckers is extremely varied in colour; few of them are without red, either on the head, the rump, or under the tail; but this red is not always apparent in the young bird: all the other colours are occaſionally preſent, with the exception of one, and that is blue, which has never been ſeen on any ſpecies of this genus. No woodpecker has been ſeen in New Holland.

The WHITE-BELLIED WOODPECKER.—Specific character, cap vermillion; body barred with white and blue. Inhabits Chili; leſs than a blackbird.—Picus ligniarius, *Gmel.* from *Molini.* White-bellied woodpecker, *Turton.*

The BUFF-CRESTED WOODPECKER.—General colour black; body beneath, line each ſide the neck, nape and rump, white; hind-part of the creſt brownish-yellow. Legs and belly dirty-white with tranſverſe black lines. Inhabits Surinam; twelve and a half inches long.—Picus melanoleucos, *Gmel.* Buff-creſted woodpecker, *Lath.*

The YELLOW-CRESTED WOODPECKER.—Colour black barred with yellow; pendent creſt, chin, cheeks, and neck, yellow. Creſt long, lax; legs duſky-green; belly and tail black. Inhabits Braſil; ſize of a jay.—Picus flaveſcens, *Gmel.* Yellow-creſted woodpecker, *Brown* and *Lath.*

The RED-BREASTED WOODPECKER.—Specific character, head, neck, and breaſt red; back and wings black; belly ochre. Bill horn-colour, with a browniſh line from the noſtrils to the eyes; many of the leſſer wing-coverts dotted with white, ſome of the greater white on the outer web, lower variegated white and black; quill-feathers black ſpotted with white. Inhabits Cayenne; nine inches long.—Picus ruber, *Gmel.* Red-breaſted woodpecker, *Latham.*

The WHITE-RUMPED WOODPECKER. — Duſky, ſtreaked and waved with whitiſh, beneath white; firſt quill-feathers black, ſecondary white with two black bars. Bill corneous; greater wing-coverts black; rump white; legs black. Inhabits Long Iſland: nine inches long.—Picus obſcurus, *Gmel.* White-rumped woodpecker, *Lath.*

The STRIPED-BELLIED WOODPECKER.—Black; crown, lores, and ſubmaxillary band, ſcarlet; belly ſtreaked white and black; tail-feathers white at the tip. Length eight inches; orbits white; cheeks ſtreaked with black.—Picus faſciatus, *Gmel.* Striped-tailed woodpecker, *Latham.*

The CAPE WOODPECKER.—This is Buffon's *Pic à tête griſe du Cap;* but, as his deſcription was taken from a young bird, it is neceſſary, ſays Vaillant, now to give it a name which may prevent a miſtake as to the ſpecies; for, as both male and female, in their adult ſtate, have the top of the head olive and red, the name *tête griſe*, grey-head, muſt be abandoned.

This is our Cape Woodpecker, vol. iv. p. 515, but, as the account is very imperfect, we ſubjoin the following

following from Vaillant.—Extreme length ſix inches and a half. The male has the forehead and top of the head olive-grey mixed with red, and the hind head is covered with ſilky feathers of a bright red. The cheeks and throat are like the forehead; the breaſt olive-green with a yellow gloſs, which has a bright effect when expoſed to the light; and this is the prevailing colour of the plumage in general, except on the rump and tail-coverts, which are bright red; and the wing and tail quills, which are dark brown in their interior parts only. The bill and nails are black; eyes red brown; feet and legs lead-colour.

The female is leſs than the male; and what is olive in his plumage is in her's browniſh; and her red is not ſo bright, nor ſo far extended; yet ſhe has red on the ſame parts at the age of two years. A male of the firſt year has already ſome red on the hind head; but the female has none but on the rump; her head, cheeks, and throat, are grey, as Buffon has deſcribed it.

This ſpecies inhabits the whole eaſtern coaſt of Africa, from the river Duywen Hock quite to Caffraria; it occurs alſo in the country, but not on the weſtern coaſt. It is known at Senegal alſo. The female lays four white eggs in the hole of a tree; and the male ſhares with her the labour of incubation. —Picus Capenſis, *Gmel.* P. Capenſis, var. 2. *Turton.* Pic olive, *Vaillant*, N° 248, 249. Pic à tête griſe du Cap, *Buff.* Cape woodpecker, *Latham.*

The Gold-tailed Woodpecker. — Colour above brown, beneath claret dotted with black; wings beneath, and ſhafts of the wings and tail, vermillion. Bill brown, rather bent, with a red ſtreak each ſide: tail pointed, the feathers forked at the end. Inhabits the Cape of Good Hope: ten inches long.—Picus Cafer, *Gmel.* Gold-winged woodpecker, *Turton*, who calls the auratus by the ſame name.

The

The Crimson-breasted Woodpecker.—Specific character, olive; neck beneath, breaſt, and rump, pale red; chin, throat, quill-feathers, and vent, duſky brown; tail above black. Vaillant gives the name of *laboureur* to this ſpecies, becauſe it performs on the ground what the reſt of the picæ do upon trees; that is, it perforates for the purpoſe of devouring larvæ and inſects, which are as numerous in the ground, probably, as in trees.

This ſpecies never climbs; yet its tail is formed ſimilarly to thoſe which do climb. It differs from the true woodpeckers in being more ſociable; they unite in flocks of thirty or forty. It is extremely difficult to diſcriminate, by the inſpection of a dead bird, the earthpecker from the woodpecker. Vaillant gives the following deſcription of the only one he met with in Africa. It is about the ſize of the Picus viridis, or green woodpecker of Europe. In the male, the upper ſurface is chiefly olive brown, lighter on the neck than on the wings; but all variegated with vermicular ſpots of fawn-colour, which ſpots are ſtronger on the tail and wings. The throat and front of the neck white; lower down are ſome yellowiſh ſpots inclining to red towards the breaſt; the breaſt, ſternum, and rump, are abſolutely red; the reſt of the under ſurface is yellow inclining to red. The eyes are reddiſh yellow; the bill black, but always covered with dirt; feet brown. The female is leſs, and her colours fainter; in the young bird, the brown of the upper ſurface is but aſh-colour, the red of the under parts hardly viſible, the eyes grey. This ſpecies has a better and more continued flight than the climbing woodpeckers.

Theſe birds are pretty common in Africa; their retreats are the barren and rocky mountains, whence in the day-time they come down into the plains, and return at night into the holes and caverns where they raiſe their young; the laying is from five to eight

reddiſh eggs, which the male aſſiſts in hatching. They are often ſeen at the Cape of Good Hope, and about the Table mountain.—Picus olivaceus, *Gmel.* Crimſon-breaſted woodpecker, *Latham.* Pic marcheur, *Sonnini.* Pic laboureur, *Vaillant*, N° 254, 255.

The RED-CHEEKED WOODPECKER.—Body teſtaceous, waved with black; temples blood-red. Bill browniſh; legs duſky. Inhabits Guiana and Surinam; nine inches long.—Picus undatus, *Gmel.* Red-cheeked woodpecker, *Edw.* and *Latham.*

The RED-WINGED WOODPECKER. — This is creſted; above red, beneath white; throat roſy; bill and tail blue; tail-coverts green. Spot on the chin yellow; quill feathers black with large white ſpots; legs duſky. Inhabits Java; nine inches long.—Picus miniatus, *Gmel.* Red-winged woodpecker, *Penn.* and *Lath.*

The MALACCA WOODPECKER. Specific character, creſted; head and ſhoulders ſcarlet; chin and throat rufous-yellow; body beneath barred with black and white; tail black. Bill black; irids red; rump greeniſh-yellow with black bands; tail-feathers duſky-red, within ſpotted with white. Inhabits Malacca; about thirteen inches long.—Picus Malaccenſis, *Turton's Linn.*

The BLUE-THROATED WOODPECKER.—Colour above green; beneath bluiſh; crown and rump yellow; throat, quill, and tail-feathers black. Breaſt and belly bluiſh-aſh; under the throat a large oval patch of gloſſy blue-black; throat ſurrounded by a band of white; legs olive. Inhabits Ceylon, thirteen inches long. — Picus quadrimaculatus, the blue-throated woodpecker, *Turton*, from *Cim. Phyſ.* 99. pl. 54.

The GREY-HEADED GREEN WOODPECKER.—Colour moſtly cinereous, front obſcurely ſpotted with red; back, ſhoulders, wing and tail-coverts, green; rump

rump yellow; wings and tail brown; chin whitiſh. Bill yellowiſh at the baſe; quill feathers with yellowiſh ſpots; tail ſtreaked with duſky; legs and claws black. Inhabits Norway, Ruſſia, and Siberia; thirteen inches long.—Picus canus, *Gmel.* P. viridis Norwegicus, *Briſſ.* Grey-headed green woodpecker, *Lath.*

The Half-billed Woodpecker. — Specific character, above brown-aſh, beneath white; head brown ſpotted with yellowiſh; upper mandible ſhort. Bill pale, the ſhort upper mandible probably only a luſus naturæ; tail and wings brown; quill feathers ſpotted with white at the outer edge. Inhabits India; ſize of a martin.—Picus ſemiroſtris, *Gmel.*—Half-billed woodpecker, *Latham.*

The Whiskered Woodpecker.—Specific character, two large black whiſkers, one beginning at the eye, the other from the lower mandible. The cheeks and neck are white, which makes theſe black whiſkers more remarkable; and not only the male, but the young birds before they quit the neſt, are thus whiſkered.

This ſpecies is about the ſize of the Greater Spotted Woodpecker, vol. iv. p. 530. in length nine inches. The front of the head is black dotted with faint red; the hind-head vermillion; and lower down is a large black patch; the reſt of the upper ſurface is a fine mellow olive-green, in different lights inclining to brown, yellow, and even grey, not without ſome ſpots of gold on the wings and tail; the under parts are green alſo, but with vermicular ſpots of yellow. The bill is black; eyes dark red; legs and feet brown. The female is ſomewhat leſs; but ſhe is perfectly to be diſtinguiſhed, becauſe her hind-head is black inſtead of red, and her colours are in general duller and more inclining to brown. The young male has a little patch of red on the hind-head, but in other reſpects he reſembles the adult female; and, on the

other hand, ſome aged females have been ſeen with a little red on the head like the young males.

This ſpecies inhabits Caffraria, where it is very commonly met with climbing the trunks of mimoſa-trees. It ſtrikes extremely hard with its bill, not with an intention of perforating the ſound wood, but merely to diſcover if there be any hollow or decayed part, to frighten the inſects beneath, and bring them out of their holes. The female lays four white eggs; and the male aſſiſts her in hatching them.—Pic à double mouſtache, *Vaillant*, N° 251, 252.

The Middle Spotted Woodpecker.—This is probably the young of the Greater Spotted Woodpecker; it being ſomething leſs, and the colours nearly the ſame. The cap is red; cheeks, and the tips of the three lateral tail-feathers, white.—Picus medius, *Linn. Gmel.* and *Scop.* P. major, *Aldr.* P. varius ex albo et nigro, *Geſner.* P. varius minor, *Briſſ. Ray.* Pic varié à tête rouge, *Buff.* Middle ſpotted woodpecker, *Lath.*

The Red-crested Woodpecker. — Specific character, creſt red, wing and tail-quills gold colour. This is the ſmalleſt of the African ſpecies, and the moſt common in the woods neareſt the Cape. Length of the male five inches and a half; female ſomewhat leſs. The forehead is red-brown; then follows a little black; and behind that, covering all the back of the head, a tuft of ſlender feathers of a bright red colour, inclined backwards, but which the bird can erect at will. The reſt of the upper ſurface is olive-brown with ſcollops of yellowiſh white; but the ſtems of the wing and tail feathers are of a ſhining gold-yellow. Over the eyes under the creſt on each ſide, is a ſtripe of white; the cheeks are rufous, mixed with ſome white; the throat is white, with a black ſtripe on each ſide falling down on the breaſt; the under parts are mottled black and white, with ſhades of yellow. The eyes are yellowiſh; bill and legs brown.

The

The colours of the male are leſs vivid; her tuft is leſs, and moſtly brown inſtead of red. She lays from five to ſeven white eggs, and the male ſhares with her the pleaſing taſk of incubation.

Vaillant firſt met with this ſpecies at *Groote-vaders Boſch*, or Grandfather's Wood, on the eaſt coaſt of Africa; it occurs alſo in the woods which ſkirt the mountains of Twenty-four Rivers; in the interior, and, laſtly, in the rows of mimoſa and ebony trees on each ſide the Elephant River, on the weſt coaſt; but, advancing towards the Cape of Good Hope, not one of this ſpecies is to be found beyond theſe limits. —Petit pic à baguettes d'or, *Vaillant*, N° 253.

The YELLOW-LEGGED WOODPECKER.—Above black, beneath white; legs yellow. Length five inches and a half. Hind-head black; upper edge of the wings white.—Picus flavipes, *Gmel.* Yellow-legged woodpecker, *Penn.*

SITTUS, THE NUTHATCH.

The CHINESE NUTHATCH.—Specific character, the lower eyelid purple. Creſted head and bill black; back duſky-brown inclining to blue; belly and breaſt white, towards the chin black; near the eyes a ſmall ſcarlet ſpot, and near this a large ſnowy blotch; from the temples to the chin a black line; chin white bounded by black; rump yellow; wing-coverts ferruginous; tail-feathers blackiſh, tipt with white. Inhabits China; feeds on rice, and is often tamed.—Sitta Sinenſis, *Gmel.* from *Oſbeck.* Chineſe nuthatch, *Latham.*

TODUS, THE TODY.

The BROWN TODY.—Specific character, colour above ferruginous, beneath olive ſpotted with white; wing-coverts with a duſky band. Inhabits South America; leſs than four inches long.—Todus fuſcus, *Gmel.* Brown tody, *Lath.*

The

The KING TODY. — Colour above blackiſh-brown; beneath reddiſh; creſt cheſnut, ſpotted with white at the tip; chin and eyelids white. Bill duſky-brown; creſt tranſverſe, conſiſting of 4 or 5 rows of rounded feathers; wing-coverts reddiſh-brown; breaſt with tranſverſe blackiſh lines; legs fleſh-colour. Inhabits Cayenne; ſeven inches long.—Todus regius, *Gmel.* Roi des gobes-mouches, Tyran hupé de Cayenne, *Buff.* King tody, *Latl.*

The CRESTED TODY. — Creſt ſcarlet tipt with black; body brown, ſpotted with white. Bill depreſſed, ſlender, lanceolate, obtuſe; body above grey-brown; wing-coverts with a little white; quill-feathers blackiſh; chin whitiſh-aſh; breaſt and belly waved with brown and duſky-aſh; tail-feathers brown, beneath paler, two middle ones blackiſh. Inhabits Guinea; probably only a variety of the laſt.—Todus criſtatus, *Gmel.* Creſted-tody, *Turton.*

The PARADISE TODY.—This and its varieties ſeem to be the ſame with the Paradiſe Flycatcher, vol. vii. p. 304. Linnæus, in the 10th edition of the Syſt. Nat. had called it Corvus paradiſi; in his 12th and laſt edition, Muſcicapa paradiſi; and in that genus (order Paſſeres) Gmelin has repeated it, with little variation in the deſcription or ſynonymes. There ſeems to have been no ſmall difficulty in determining the place of this ſpecies. Briſſon calls in Picus Papoenſis; Seba and Edwards, a bird of paradiſe. Dr. Turton has very properly ſuppreſſed it in this place, and has deſcribed it among the Flycatchers only.—Todus paradiſeus, *Gmel.*

The WHITE-CHINNED TODY.—Colour above brown, beneath white; breaſt ſpotted with brown; chin white. Bill very much depreſſed; tail rounded; legs brown, with elevated ſegments; claws yellow.—Todus novus, *Gmel.* White-chinned tody, *Latham.*

The GREAT-BILLED TODY.—Body black; chin, belly, rump, and vent, red; bill very broad. Bill black-

black-blue, whitiſh at the tip and edges; upper tail-coverts red; ſix ſcapular feathers white, pointed, incurvate. — Todus macrorhynchos, *Gmel.* Great-billed tody, *Lath.*

ALCEDO, THE KINGFISHER.

The SPLENDID KINGFISHER.—Specific character, tail ſhort, yellowiſh green; ſhoulders, throat, and rump, yellow, wings and crown blue. Inhabits South America. The bill is yellowiſh horn-colour; a bright yellow ſtripe runs on each ſide the head, including the region of the eyes. The ſmaller wing-coverts are edged with yellow; legs reddiſh brown. — Alcedo formoſa, *Turton,* from *Cym. Phyſ.*

The EASTERN KINGFISHER. — A very ſmall ſpecies, about one third leſs than the common kingfiſher: length four inches and a half. Bill red; the upper part of the head, and the throat, blue; on each ſide, from the baſe of the bill, is a ſtripe of the ſame, paſſing through the eyes to the hind head; over the eyes a ſtripe of white, and beneath the eyes a rufous ſpot; the upper parts of the neck, body, wings, and tail, are bright green, and the under parts rufous: the quills blue; and the tail-feathers green on the edges. Inhabits the Eaſt Indies.—Alcedo orientalis, *Gmelin.* Iſpida Indica, *Briſſ.* Eaſtern kingfiſher, *Lath.*

The SPOTTED KINGFISHER.—Length ſeven inches. The bill duſky, baſe of the lower mandible orange; a broad black line runs from the bill through the eyes; above and beneath which are lines of orange colour; crown of the head black, changing to gold green; the ſides of the head, beneath the eyes, green: this colour alſo covers the upper parts of the body; wings and tail ſpotted with white on the edges; the under parts are orange-colour: between the neck and breaſt is a broad black band, edged with aſh-colour.

lour. It inhabits Guiana.—Alcedo Inda, *Gmelin.* Spotted kingfiſher, *Edw.* and *Lath.*

The Surinam Kingfisher.—Smaller than a blackbird: the bill black, thick, pointed, and two inches in length: the top of the head greeniſh black, tranſverſely ſpotted with blue; the back and wing-quills greeniſh blue; the tail ſhort, and of a dull blue; the chin and belly white, with a mixture of red; the breaſt is rufous, the feathers of which are tipped with light blue. This is alſo a native of Guiana. — Alcedo Surinamenſis, *Gmel.* Surinam kingfiſher, *Latham.* Martin pêcheur, *Firmin's Suriam.*

The Brasilian Kingfisher.—This ſpecies is about the ſize of the lark: its bill is ſtraight and black; all the upper ſide of the head, neck, wings, and tail, is reddiſh, or rather bright cheſnut, mixed with white; the throat and the under part of the body are white, and a brown ſtreak runs from the bill to the eye. It is a native of Braſil; and its cry is not unlike that of a young turkey.—Alcedo Braſilienſis, *Gmelin.* Iſpida Braſilienſis, *Briſſ.* Gip-gap, *Buff.* Braſilian kingfiſher, *Latham.*

The Amazonian Kingfisher.—Body above gloſſy green; beneath, and lunule on the neck, white; ſides variegated with green; wings and tail ſpotted with white. Bill and legs black. Inhabits Cayenne; thirteen inches long. Perhaps a variety of the bi-color, vol. v. p. 23.—Alcedo Amazona, *Turton,* from *Latham.*

The Coromandel Kingfisher.—Body above pale violet-roſy, beneath reddiſh; rump with a longitudinal bluiſh band; chin white. Bill, irides, and legs, red; quill-feathers within reddiſh-yellow. Inhabits Coromandel; ſize of a blackbird.—Alcedo Coromanda, *Turton,* from *Latham.*

The Respected Kingfisher. — Specific character, tail long; eyebrows white, collar greeniſh black.

black. Length eight inches and a half. Bill depreſſed, black, and an inch and a half in length; the lower mandible white. The upper parts of the body olive-green; under parts white. Native of Otaheite, where it is accounted ſacred, and not allowed to be taken or killed. — Alcedo tuta, *Gmel.* Reſpected kingfiſher, *Latham.*

The VENERATED KINGFISHER.—Length nine inches: bill an inch and three quarters long, much depreſſed, and of a black colour: the upper parts of the body are light brown, tinged with gloſſy green which forms a kind of wreath round the back part of the head; the wing-coverts are brown, margined with green: the under parts of the body are very pale: the tail is rounded at the ends, and margined with green. This bird inhabits Apye, one of the Friendly Iſles, where it is held as ſacred among the natives as that of Otaheite.—Alcedo venerata, *Gmel.* Venerated kingfiſher, *Latham.*

The SACRED KINGFISHER.—This is larger than the common ſpecies; length nine inches and a half. The bill is depreſſed, an inch and three quarters long, and of a lead-colour, but the under part of the lower mandible is white. The head and upper parts of the body are of a light blue green; over the eye is a ſtripe of pale ferruginous, beginning at the noſtrils, and meeting at the back of the head; beneath the eye a narrow orange ferruginous ſtripe; and beneath that a blue band; quills and tail blue. All the under parts are white, with a tinge of buff-colour paſſing round the neck as a collar.—There are four other varieties of this ſpecies, one of which is a native of New Zealand; the other three inhabit Otaheite, and the iſlands in the South Seas, diſcovered by Captain Cook.—Alcedo ſacra, *Gmel.* Sacred kingfiſher, *Lath.* Martin pecheur à collier blanc des Philippines, (Gmelin's var. *i.*) *Buff.* and *Sonnerat.*

The COLLARED KINGFISHER.—Colour above

green blue; beneath, and collar, white. The bill is black, but white beneath at the baſe; legs black. Inhabits the Philippine Iſlands; leſs than a blackbird. —Alcedo collaris, *Turton.*

The YELLOW KINGFISHER.—The general caſt of the plumage is yellow; back of the head green, bill red, and tail blue. Native of the iſland of Celebes; ſize of a lark. — Alcedo flavicans, *Gmel.* Yellow and green kingfiſher, *Turton.* Yellow kingfiſher, *Ency. Lond.* Ten-rou-joulon, *by the natives of Celebes.*

The NEW-GUINEA KINGFISHER.—This ſpecies is about the ſize of a rook; the bill and irides blackiſh; the whole of the plumage is black, irregularly ſpotted with white; the neck and belly are marked with longitudinal white ſpots, each feather having a ſtripe down the middle: on each ſide of the neck are two large white ſpots, the upper one ſhaped like a pear with the point upwards: native of New Guinea. —Alcedo Novæ Guineæ, *Gmel.* Martin pecheur de la Nouvelle Guinée, *Buff.* New-Guinea kingfiſher, *Latham.*

The EGYPTIAN KINGFISHER.—About the ſize of the Royſton crow. The bill is blackiſh, more than half an inch broad at the baſe, and two inches in length: the head, ſhoulders, and back, are brown, marked with oblong ferruginous ſpots; the throat ferruginous white; belly and thighs whitiſh, with longitudinal cinereous ſpots; upper tail coverts quite white; quills ſpotted with white on the inner webs, chiefly at the tips; legs pale green. Inhabits Lower Egypt, about Cairo; builds in ſycamore and date trees; feeds on frogs, inſects, and ſmall fiſh. Its cry is not unlike that of the common crow.—Alcedo Ægyptia, *Gmel.* from *Haſſelquiſt.* Egyptian kingfiſher, *Latham.*

The HALF-BLUE KINGFISHER.—General colour of the body ſky-blue; head cinereous; ſhoulders, or joints of the wings, black; vent ferruginous; tail blue;

blue; bill and feet red. It is found on the coaſts of the Red Sea, in the province of Yemen, in Arabia.—Alcedo ſemicœrulea, *Gmel.* from *Forſk.* Half-blue kingfiſher, *Ency. Lond.* Yemen kingfiſher, *Turton.*

GALBULA, THE JACAMAR.

The Jacamars are claſſed by Linnæus with the Kingfiſhers; Briſſon and Latham have ſeparated them; and Dr. Turton has followed their example in his tranſlation of Gmelin's Linnæus. At the beginning of our ſixth volume will be found a deſcription of the three ſpecies then known; to which we have one, ſince diſcovered by Pallas, to add.

The GREAT JACAMAR.—Lately diſcovered by Dr. Pallas, who calls it a *new jacamaciri,* and ſays it is about the ſize of our green woodpecker. The bill is ſquare, ſides flat, and noſtrils bare; the head and wings are green gold, the back a fine bronze; under ſide from the throat to the tail ferruginous; tail longer than the body, and cuneiform; the fore toes cloven. It is not ſaid to what country this bird owes its nativity. — Alcedo grandis, *Gmel.* from *Pallas.* Galbula grandis, *Turton.* Great jacamar, *Latham.*

MEROPS, THE BEE-EATER.

The COROMANDEL BEE-EATER. — Prevailing colour yellowiſh; ſides of the neck, wings and tail, yellow; wing-coverts, back, and rump, waved-blueiſh; ocular ſtripe black. Bill and legs black; irids pale rufous; chin greeniſh. Inhabits India and Coromandel.—Merops Coromandus, *Turton's Linn.*

The SUPERB BEE-EATER.—General colour red; front, throat, and rump, blue; two middle tail-feathers longer. Bill blackiſh; quill-feathers edged with brown; lower half of the middle tail-feathers dark brown. Length nine inches. — Merops ſuperbus, *Turton,* from *Nat. Miſc.* Pl. 78.

The SURINAM BEE-EATER.—This is variegated;

hind-head reddiſh; ſcrag greeniſh-yellow; quill-feathers greeniſh, varied with black and blue. Inhabits Surinam. Irids cheſnut; claws black. — Merops Surinamenſis, *Gmel.* Guepier, *Fermin.* Surinam bee-eater, *Lath.*

The New Zealand Bee-eater. — Gloſſy greeniſh-black; greater wing-coverts and tuft of curled feathers each ſide the neck white; tail even, coverts blue. Legs and claws black; inſide the mouth and tongue yellow, the latter tipt with black and beſet with briſtles; feathers of the neck lax, long, a little curled, with a longitudinal white ſtreak through the ſhaft. Inhabits New Zealand; eleven inches long; ſings well, is held ſacred by the inhabitants; fleſh good.—Merops Novæ Seelandiæ, *Gmel.* New Zealand creeper, *Brown* and *Cook.* Poe bee-eater, *Lath.*

The Embroidered Bee-eater.—Black variegated with yellow. Bill duſky; head and neck black; ſpace round the eyes yellow, upper wing-coverts yellow, lower black; quill-feathers black edged with yellow; tail wedged, black, edged and tipt with yellow. Inhabits New Holland; ſeven inches long.—Merops Phrygius, the embroidered bee-eater, *Turton*, from *Zool. New Holl.* Pl. 4.

The Yellow-tufted Bee-eater. — Colour chiefly black; a large tuft of feathers behind the wings and vent yellow; tail wedged, edged and tipt with white. Noſtrils covered with a membrane; tongue fringed at the tip; feathers of the head and throat ſhort; tail-feathers pointed, two middle ones ſeven, the outer two, inches long. Inhabits Sandwich Iſlands; fourteen inches long; the yellow feathers are uſed by the natives as ornaments in dreſs.—Merops niger, *Gmel.* Yellow-tufted bee-eater, *Lath.*

The New Holland Bee-eater.—Brown, belly yellow; wattles carunculate; tail wedged, tipt with white. Bill black; noſtrils pervious, half-covered with

with a membrane; crown blackiſh; at the angle of the mouth a ſilvery ſtripe; behind the baſe of the lower mandible a long, orange, pendent caruncle; body above brown, the ſhafts of the feathers whitiſh; wings and wedged tail blackiſh; ſeven outer quill-feathers tipt with white; all the tail-feathers more or leſs tipt with white; legs browniſh, the outer toe connected at the baſe to the middle one. Inhabits New Holland; fourteen inches and a half long.—Merops carunculatus, New Holland bee-eater, *Turton.*

The HORNED BEE-EATER.—Brown, head naked-iſh; body beneath and tips of the tail-feathers whitiſh; horn on the front obtuſe. Bill a little curved, pale brown; noſtrils oval; tongue briſtly at the tip; a ſhort obtuſe horn at the baſe of the upper mandible; head and upper part of the neck with a few briſtly feathers; body brown, the feathers edged with olive; tail even, tipt with white; legs brown, wrinkled. Inhabits New Holland; fourteen inches long.—Merops corniculatus, Horned bee-eater, *Turton.*

The RED-THROATED BEE-EATER.—Black; forehead and rump blue; belly ſpotted with blue; throat red. Bill and legs blackiſh; irids red; band acroſs the eyes blue; lower half of ſome of the quill-feathers deep ruſty, edges of thoſe near the body ſlightly marked with blue-green; two middle tail-feathers blue-green. Inhabits Sierra Leona.—Merops gularis, Red-throated bee-eater, *Turton*, from *Nat. Miſcel.* Pl. 337.

CERTHIA, THE CREEPER.

Vaillant ſays, that the form of the tail in the creepers is of as much importance to them in climbing as that of their feet; this obſervation, he adds, has eſcaped all naturaliſts hitherto, which has occaſioned very different ſorts of birds to be confounded with the curved-billed creepers, of which only one ſpecies (the

(the common creeper) is known. He ſays they climb by reſting on their tails, the quills of which are very elaſtic, and armed with ſtiff hard points; and thus they are puſhed up as by a ſpring at every effort they make to aſcend. But he obſerves that it is very abſurd to repreſent them as deſcending on the upright branch of a tree, as Buffon has done, ſince it is what they cannot poſſibly execute. *Vaillant's African Birds*, vol. iii. p. 146.

The New-Holland Creeper. — Body above black, beneath ſtreaked with white; eyebrows and ſpot near the ears white; quill and tail-feathers edged with yellow. Bill duſky, pale at the tip; noſtrils covered with a membrane; tail rounded, two outer feathers within tipt with white; legs pale. Inhabits New Holland; ſeven inches long.—Certhia Novæ Hollandiæ, *Turton.*

The Hoary Creeper.—Body browniſh; neck and wings paler. Inhabits New Caledonia; very ſmall.—Certhia incana, *Turton.*

The Cardinal Creeper.—Body black; head, neck, breaſt, and line down the middle of the back, red; tail even. Bill black, whitiſh at the baſe; tongue extenſile, fringed at the tip; a black ſtreak from the bill to the eyes; irids cheſnut; legs plumbeous; claws black. Inhabits Tanna Iſland; ſucks the nectaries of flowers; ſize of the common creeper. —Certhia cardinalis, *Gmel.* Cardinal creeper, *Lath.*

The Ignoble Creeper. — Above ſooty-black, beneath cinereous with whitiſh elliptic lines. Length eight inches; bill yellowiſh, black on the back; wings brown with black ſhafts; tail and legs black. —Certhia ignobilis, *Turton.*

The Waved Creeper.—Above ſooty-aſh, beneath white tranſverſely waved with black. Length ſeven inches; bill arched, brown; legs black.—Certhia undulata, *Turton.*

The Cape Brown Creeper.—Body brown, tail-feathers

feathers blackiſh, the outer ones without fringed with white. Bill, tail, and legs, blackiſh. Inhabits the Cape of Good Hope: four inches long.—Certhia Capenſis, *Gmel.* and *Briſſ.*

The *Black-tailed Creeper* is marked by Gmelin as a variety, but by Turton as a ſeparate ſpecies.—Head and back violet: breaſt and belly greeniſh: wings brown; tail black, a little forked; ſhanks and toes black. Bill and legs black; claws yellow. Inhabits the Cape of Good Hope; ſeven inches long.—C. melanura, β, *Gmel.* from *Sparrman.* Black-tailed creeper, *Turton.*

The LEONA CREEPER. — Colour moſtly gold-green; fore-head, chin, broad pectoral band, and rump, violet; wings brown; belly yellow. Bill and legs blackiſh; pectoral band bounded below by black. Inhabits Sierra Leona; three inches and a half long.—Certhia venuſta, *Turton, Nat. Miſc.*

The PINE CREEPER.—Olive above, yellow beneath; wings blue, with two white ſtripes. Lores black; front and feet duſky, belly white. Female paler. Inhabits North America; eſpecially Carolina and Pennſylvania, in pine-trees; length four inches and three quarters. — Certhia pinus, *Gmel.* Parus Americanus, *Briſſ.* Figuier des ſapins, *Buff.* Pine warbler, *Penn.* and *Lath.* Pine creeper, *Cateſby* and *Edwards.*

The BRACELETED CREEPER.—Prevailing colour green; wings when folded, above black, beneath yellow; ſhoulders, bracelets on the thighs, and ſpots on the rump, ſapphire. Bill black; legs yellowiſh; body beneath whitiſh-green; vent yellowiſh; quill-feathers black, the inner edge yellow. Inhabits Surinam; five inches long.—Certhia armillata, *Turton.*

The OLIVE-GREEN CREEPER. — Colour moſtly olive; quill and tail-feathers edged with yellow. Bill and legs duſky. Inhabits the Sandwich Iſlands; five inches long.—Certhia virens, *Gmel.* Olive-green creeper, *Latham.*

The

The Scarlet Creeper. — Red; wings and tail black; vent white. Bill, legs, and claws, black; lower part of the belly white. Inhabits the South-Sea Iſlands; barely four inches long.—Certhia ruber, *Gmel.* Scarlet creeper, *Lath.*

The Blue-rumped Creeper. — Body moſtly green; rump blue; chin red; wings and tail rufous-gold. Bill and legs black. Inhabits the Cape of Good Hope; ſize of a canary bird.—Certhia viresſcens, Blue-rumped creeper, *Turton*

The Tufted Creeper.—Body olive; belly and tail black; ſides of the breaſt with a yellow tuft. Bill and legs black; firſt quill-feathers brown. Inhabits Bengal; four inches long.—Certhia cirrata, Tufted creeper, *Turton.*

The Cupreous Creeper.—Colour green-ochre; wings ſooty; tail gloſſy-black; bill and legs black. —Certhia ænia, *Turton*, from *Muſ. Carlſ.*

The Blue-throated Creeper.—Above olive-aſh, beneath pale yellow; chin, throat, and upper part of the breaſt, ſilky-blue.—Certhia gularis, *Turton.*

The Humming Creeper.—Above brown-olive, beneath yellowiſh dirty-white; tail black; wings ſooty.—Certhia trochilea, *Turton.*

The Green-tailed Creeper. — Black; fore-part of the neck purple; wings and tail yellow leek-green.—Certhia praſinoptera, *Turton.*

The Macassar Creeper.—Green-gold, beneath blackiſh-brown. Bill whitiſh; legs black. Inhabits Macaſſar; fourteen inches and a half long.—Certhia Macaſſarienſis, *Gmel.* Polytmus Indica, *Briſſ.* Macaſſar creeper, *Lath.*

The Indian Creeper. — Gloſſy-blue; lower part of the neck whitiſh. Bill and legs black. Inhabits India; four inches and a half long.—Certhia Indica, *Gmel.* Indian creeper, *Latham.*

The Amboyna Creeper.—Cinereous, beneath green; head and neck yellow; breaſt red; wings black.

black. Bill yellowiſh. Inhabits Amboina; two inches and a quarter long.—Certhia Amboinenſis, *Gmel.* Polytmus Amboinenſis, *Briſſ.* Amboina creeper, *Lath.*

The RED-BACKED CREEPER.—Body above ſcarlet; beneath reddiſh-white; ſides of the neck with a black bar; wing-coverts deep green; wings and tail black. Bill and legs black; irids red. Inhabits India; three inches long.—Certhia erythronotos, *Turton.*

The SNUFF-COLOURED CREEPER.—Specific character, two middle tail-feathers very long; body above, head, and neck, ſnuff-colour; beneath green; tail-feathers blackiſh-green. Length eight inches and a half; bill a little curved, blackiſh-brown; lower wing-coverts yellow; legs black. Certhia tabacina, *Turton.*

The ASIATIC CREEPER.—Body deep blue; wings brown; bill and legs black. Inhabits India; four inches long.—Certhia Aſiatica, *Turton.*

The CAPE CREEPER. — Plumage of the back brown; breaſt and belly pale; middle tail-feathers longer. Bill black, a little compreſſed and curved; chin pale, with rough black hairs; rump yellowiſh-green; vent clear yellow; tail black, wedged, as long as the body, the four middle feathers thrice as long as the reſt, two middle ones very long; wings black. Inhabits the Cape of Good Hope; ſize of a thruſh.—Certhia Caffra, *Gmel.* Cape creeper, *Turton.*

TROCHILUS, THE HUMMING-BIRD.

I. *Bill curved.*

The PURPLE-CRESTED HUMMING-BIRD.—Body green-gold; wings and tail brown; creſt purple. Inhabits Chili. Wings and tail varied with gold.—Trochilus galeritus, *Gmel.* from *Moline.*

The YELLOW HUMMING-BIRD. — Yellowiſh; chin and rump blue; belly white; wings and tail black.—Trochilus gularis, *Gmel.* from *Miller.* Yellow humming-bird, *Turton.*

The TAWNY HUMMING-BIRD.—Colour orange-tawny; wing and tail feathers black, pale underneath. Bill and legs horn-colour. Tail about two inches long; feathers twelve in number, and equal. Inhabits South America; length more than five inches. This and the next belong perhaps rather to the genus Certhia; they are ſuppreſſed here by Dr. Turton.—Trochilus fulvus, *Gmel.* from *Maerter*, i. 76.

The VARIED HUMMING-BIRD. — Above gold-green, underneath whitiſh; breaſt ſtriped with green, blue, and red. Bill and legs black; wings pale brown; upper tail-coverts greeniſh blue; tail-feathers twelve, an inch and a half long, clouded with dark brown, and all, except the two mid-quills, tipped with white. Inhabits South America; about four inches and a half long. — Trochilus varius, *Gmel.* from *Maerter*, i. 75.

II. *Bill ſtraight.*

The CAPE HUMMING-BIRD.—Specific character, colour green; middle tail-feathers long; wing-coverts blue. Wings and tail black; the middle feathers of the latter thrice as long as the reſt, edged at the baſe with ſilky-green; vent black ſpotted with azure. Inhabits the Cape of Good Hope; ſize of a ſwallow. —Trochilus Capenſis, *Gmel.* from *Mantiſſ.*

The PATCH-NECKED HUMMING-BIRD. — Above brown, beneath white; ſides of the neck with duſky ſpots, and a ſcarlet one each ſide in the middle. Length three inches and a quarter. Bill and legs black.—Trochilus guttatus, Patch-necked humming-bird, *Turton.*

The DUSKY-CROWNED HUMMING-BIRD.—Body blue; crown duſky; chin and throat gloſſy-green; rump, wings, and tail, purple. Length four inches and a half. Bill duſky; legs black.—Trochilus obſcurus, *Gmel.* Duſky-crowned humming-bird, *Lath.*

The BLUE-CAPPED HUMMING-BIRD. — Green-gold; head, wings, and tail, blue; belly red. Bill whitiſh;

whitiſh; tail three times as long as the body. Inhabits Chili; ſize of a walnut.—Trochilus cyanocephalus, *Gmel.* from *Molini.*

The RUFF-NECKED HUMMING-BIRD. — Above rufous, beneath whitiſh; crown green-gold; throat and breaſt ſcarlet-gold; wings purpliſh-brown. Bill and legs black; lateral feathers of the neck long r, moveable; wing-coverts duſky-green; tail-feathers pointed, with a longitudinal black line down the middle, and tipt with black. Female, above green-gold; chin with crimſon ſpots. Inhabits Nootka Sound; three inches and a quarter long.—Trochilus rufus, *Gmel.* Ruff-necked humming-bird, *Latham.*

The CRESTED BROWN HUMMING-BIRD. — Pale brown; creſt blue. Inhabits Cayenne; three inches long; wings and tail duſky.—Trochilus puniceus, *Gmel.* Creſted brown humming-bird, *Latham.*

The BLACK-AND-BLUE HUMMING-BIRD.—Varied with white and blue; chin and breaſt red. Wings and tail black. Inhabits the Caribbee Iſlands.—Trochilus cyanomelus, *Turton.*

IN THE ORDER OF ANSERES.

ANSER, THE SWAN, DUCK, GOOSE, &c.

1. *Bill gibbous at the baſe.*

The BLACK-NECKED SWAN.—Specific character, bill ſemicylindric, red; head and neck black; body white; legs fleſh-colour. Inhabits Falkland Iſlands; ſize of the wild ſwan.—Anas nigricollis, *Gmel.* Black-necked ſwan, *Lath.*

The BLACK-HEADED SWAN.—Bill ſemicylindrical, red; head black, body white. Inhabits Chili; as large as the tame ſwan; female lays ſix eggs, and carries her young upon her back when ſeeking food.—Anas melanocephala, *Gmel.* from *Molini.*

The BLACK SWAN.—Moſtly black; wings edged with white; bill red. Upper mandible blackiſh at the tip, a yellow ſpot near the tip; legs black;

feet paler. Extent of wing four feet eight inches. Inhabits various parts of New Holland; eſpecially Cumberland County, where they are ſaid to be very common. Three of the ſpecies are now exhibited at Exeter Change, London.—Anas atratus, *Turton.*

The Barred-headed Goose. — Above grey, beneath pale aſh; head and neck white; lunule on the hind-head and ſpot beneath black; rump and vent white. Bill tawny-yellow, with a black nail at the tip; hind-part of the belly brown edged with white; tail grey, tipt with white; legs tawny. Inhabits India; fleſh good.—Anas Indica, Barred-headed gooſe, *Turton.*

The Painted Goose. — Plumage blackiſh-aſh with tranſverſe black lines; head, neck, middle of the belly, bar on the wings, and coverts, white. Bill, legs, primary quill and tail-feathers, black; wings with an obtuſe ſpur at the flexure. Inhabits Staten Land; twenty-eight inches long.—Anas picta, *Gmel.* Painted duck, *Cook.* Painted gooſe, *Lath.*

The Antarctic Goose.—Plumage ſnowy, bill black; legs yellow. Female, bill fleſh-colour; body brown with tranſverſe white lines; middle of the back and greater quill-feathers black; vent greeniſh-white. Inhabits Falkland Iſlands; twenty-four to twenty-ſix inches long.—Anas antarctica, *Gmel.* Antarctic gooſe, *Forſt. Cook*, and *Latham.*

The Variegated Goose. — Above brown ſpotted with white; beneath cheſnut ſpotted with white and black; bill, tail, and primary quill-feathers, black, ſecondary green; wing-coverts white; rump and vent ferruginous. Legs black. Inhabits New Zealand.—Anas variegata, *Gmel.* Variegated gooſe, *Latham.*

The Loggerhead Goose. — Above cinereous, beneath duſky; vent white; wings and pointed tail ſhort, black; bill, irids, tubercle on the wings, and legs, yellow. Bill tipt with black; ſecondary quill-feathers white on the outer edge; hind-part of the belly

belly bluiſh-aſh; claws black. Inhabits Falkland Iſlands; thirty-two inches long; fleſh rancid.—Anas cinerea, *Gmel.* Loggerheaded-gooſe, *Lath.*

The NILOTIC DUCK.—Whitiſh with hoary ſpots; ſides of the breaſt and belly with hoary lines; marginal callus on the bill and caruncle purple-red. Irids yellow; legs red. Inhabits near the Nile.—Anas Nilotica, *Gmel.* from *Haſſelqu.* Nilotic duck, *Lath.*

BERING DUCK.—Body white; wings black; neck bluiſh; caruncle at the baſe of the bill yellow, radiate in the middle with bluiſh feathers. Round the ears a greeniſh-black blotch; eyes black; orbits yellow. Inhabits Bering's Iſland; ſize of a gooſe.—Anas Beringii, *Gmel.* Bering duck, *Penn.* and *Lath.*

II. *Bill equal at the baſe.*

The LOBATED DUCK.—Plumage blackiſh with tranſverſe greyiſh lines, beneath paler; under mandible lobate beneath. Bill broad at the baſe, black, under mandible with a large, black, flat, round, flap or wattle, ſeated longitudinally; body dark cinereous, paler beneath and on the neck, waved with numerous tranſverſe whitiſh lines; legs black. Inhabits New Holland; ſize of the common duck.—Anas lobata, *Turton.*

The HOARY-HEADED GOOSE. — Reddiſh-ferruginous; head and neck grey; wing-ſpot green; ſhoulders white. Bill duſky; cheeks and wing-coverts white; back, breaſt, and belly, ferruginous with deeper tranſverſe lines; primary quill-feathers black, ſecondary green; at the flexure of the wings a bluntiſh ſpur; vent tawny with a black band; legs and tail black. Inhabits the Cape of Good Hope; leſs than the brent gooſe.—Anas cana, *Gmel.* Grey-headed duck, *Brown* and *Latham.*

The RED-BREASTED GOOSE.—Above black, beneath white; bill ſmall, conic; neck rufous; ſpot between the bill and eyes white. Bill brown with a black

black claw; irids yellowiſh-brown; pectoral band white, beneath black; chin black with an interrupted white line; tail rounded, ſhort, the feathers brown, coverts white; down long, ſoft, cinereous; legs black. Inhabits Ruſſia and Northern Siberia, rarely England; migrates in winter towards Perſia; fleſh excellent.—Anas ruficollis, *Gmel.* from *Pall.* Red-breaſted gooſe, *Penn.* and *Lath.*

The Ruddy Duck.—Rufous; wings and tail black; wing-ſpot white. Bill and legs black; head and beginning of the neck white; collar (of the male) black; rump deep black. Inhabits Ruſſia and Siberia; twenty-two inches long; lays its eggs in the fiſſures of rocks or holes of trees; fleſh very good. —Anas caſarca, *Linn.* and *Gmel.* A. rutila, *Pallas.* Collared duck, *Gent. Mag.* Ruddy duck, *Lath.*

The Collard Duck.—Black; temples, round the eyes and collar white, ſides of the neck brown. Inhabits the ſhores of the Caſpian Sea.—Anas torquata, *Gmel.* from *S. G. Gmel.*

The Red-necked Duck.—Cinereous; head and neck rufous; breaſt black; back with brown lines; wings aſhy-brown.—Anas rufa, A. ruficollis, *Scopoli.*

The Scopoli's Duck.—White varied with black; bill yellowiſh tipt with black; wing-ſpot violet-green. Lores grey; head, bill, and upper part of the breaſt, ſpotted with black; firſt quill and tail-feathers white tipt with brown.—Anas monacha, *Gmel.* from *Scop.*

The Black-tailed Duck. — Cinereous; bill and legs teſtaceous; wings and tail black. Crown and back rufous; rump black with white ſpots.—Anas melanura, *Gmel.* from *Scop.*

The Torrid Duck.—Head white; neck above black, beneath cheſnut.—Anas torrida, *Gmel.* Branta torrida, *Scop.*

The Western Duck.—White; hind-head ſubcreſted; tranſverſe ſpot on the nape and each ſide the bill green; tail brown; ten firſt quill-feathers blackiſh-

iſh-brown, the reſt black-blue. Bill and legs black; orbits, lunule at the baſe of the neck, and band from the wings to the back, black. Female ferruginous. Inhabits Kamtſchatka and America; flies in flocks, and builds in inacceſſible rocks.—Anas Stelleri, *Gmel.* from *Pall.* Weſtern duck, *Penn.* and *Lath.*

The RED-BREASTED SHOVELER.—Brown; chin and breaſt cheſnut; wings tipt with grey; wing-ſpot purple edged with white; tail ſhort, white. Bill broad, browniſh-yellow; head large; eyes ſmall; irids yellow; legs ſmall, ſlender, bay. Inhabits the fens of Lincolnſhire; ſize of a tame duck.—Anas rubens, *Gmel.* Red-breaſted ſhoveler, *Lath.*

The LAPMARK DUCK.—Cheſnut; back, wings, and tail, black; belly white. Bill broad, and with the legs black; ſecondary quill-feathers white tipt with black; flanks ferruginous. Inhabits Norway.—Anas Scandiaca, *Gmel.* A. Skoora, *Muller.* Lapmark duck, *Lath.*

The FALCATED DUCK.—Creſted; variegated with hoary and brown; breaſt ſcale-waved; front, chin, collar, and bar on the wings, white. Bill black; crown teſtaceous, reſt of the head ſilky-green with a ſmall white ſpot on the front; wing-ſpot ſteel-black edged with white; five inner quill-feathers long, falcate, varied with violet and white; legs lead-colour. Inhabits Eaſtern Siberia; eighteen inches long.—Anas falcaria, *Gmel.* from *Pall.* Falcated duck, *Penn.* and *Lath.*

The Javan teal, a variety of this, is deſcribed at vol. v. p. 226.

The MANILLA TEAL. — Head and chin white; neck, breaſt, and wing-coverts, bay; wings and tail pale greeniſh. Bill black; feathers of the back yellow edged with black, of the belly white edged with black; legs blackiſh.—Anas Manillenſis, *Gmel.* Sarcelle de Luçon, *Sonn.* Manilla teal, *Lath.*

The HINA TEAL.—Specific character, the region of the eyes green. Bill ſoft, blackiſh-grey; head and

and neck brown; under the eyes a white line; neck and upper part of the back ſpotted with black; rump cinereous; breaſt white, ſpotted. Inhabits China.—Anas hina, *Gmel.* from *Oſb.* Hina teal, *Latham.*

Sparmann's Teal.—Beneath dirty-white, above black varied with ferruginous and white; ſcapulars white, edged and lined on the diſk with ruſty-white. Bill and legs black; tail ferruginous. Inhabits near Aboam; twenty-three inches long.—Anas Sparmannia, *Turton.*

The Soft-billed Duck. — Bluiſh-lead; bill membranaceous at the tip; crown greeniſh-aſh; wings with a tranſverſe white ſpot. Bill pale aſh tipt with black; legs duſky-plumbeous. Inhabits New Zealand; eighteen inches long.—Anas malacorhynchos, *Cook* and *Lath.*

The American Wigeon. — Pale ruſty waved with black; crown and front ochre; wing-ſpot large, white; wings and tail brown. Bill lead-colour tipt with black; hind-head and neck varied with white and black; behind the eyes a black ſpot; vent black; legs duſky. Inhabits America; ſize of A. penelope; fleſh good.—Anas Americana, *Gmel.* Canard Jenſen, *Buff.* American wigeon, *Lath.*

The Cape Wigeon.—Dirty-white; back bay; wing-ſpot bluiſh-green edged with white. Bill red, black at the baſe; head ſpecked with duſky; legs red. Inhabits the Cape of Good Hope; fifteen inches long.—Anas Capenſis, *Gmel.* Cape wigeon, *Lath.*

The Ferruginous Duck.—Reddiſh brown; bill dilated and rounded at the tip; legs bluiſh. Bill long, the mandibles ſerrate at the edges; body beneath pale. Inhabits Sweden, Denmark, rarely England; weight twenty ounces.—Anas ferruginea, *Gmel.* A. rutila, *Linn.* Ferruginous duck, *Penn.* and *Lath.*

The Sharp-tailed Duck. — This is probably the female of the Long-tailed Duck, A. glacialis,

vol.

vol. v. p. 201.—Anas hyemalis, *Linn.* and *Gmel.* A. longicauda Iſlandica, *Briſſ.* Sharp-tailed duck, called Havelda, *Will.* Long tailed duck, *Edwards*, t. 156.

The Feroe Teal, vol. v. p. 227, is a variety of this.

The LURID DUCK.—Body black; head cheſnut; breaſt with tranſverſe red lines. Near the mouth a white ſpot; belly whitiſh ſpotted with blackiſh, on the ſides and vent ſnowy; quill-feathers varied with cinereous and black; tail-feathers twelve, black. Inhabits ſouthern Ruſſia; larger than the teal.—Anas lurida, *Gmel.*

The CASPIAN DUCK. — Ochre-yellow, beneath ſnowy; black cinereous; rump and tail deep black; quill-feathers fifteen to nineteen, tipt with white. Inhabits the Caſpian Sea; near twenty inches long; fleſh rancid.—Anas kekuſhka, *Gmel.* from *S. G. Gmel.*

The AMERICAN TEAL. — Plumage waved with black and white; head and upper part of the neck cheſnut; throat and breaſt ſpotted with black; wing-ſpot green; line beneath the eyes and humeral arch white. From the eyes to the hind-head each ſide a green ſtripe; wing-coverts brown; legs duſky. Female reddiſh-brown-aſh ſpotted with black. Inhabits America, from Carolina to Hudſon's Bay.—Anas Carolinenſis, *Gmel.* American teal, *Penn.* and *Lath.*

The BROWN DUCK. — Browniſh; head and neck paler; wings cinereous, ſpot blue tipt with white; tail duſky. Bill thick at the baſe, bluiſh tipt with black; breaſt ruſty-waved. Inhabits America; ſixteen inches long.—Anas fuſceſcens, *Gmel.* Brown duck, *Penn.* and *Lath.*

The SPOTTED-BILLED DUCK. — Black; cheeks and part of the throat cinereous; wing-ſpot green, above white, beneath bounded with white and black; ſecondary quill-feathers white. Bill long, black, a red ſpot each ſide the baſe and tipt with white; band acroſs the eyes black; vent black; legs yellow. In-

habits Ceylon.—Anas pocciloryncha, *Gmel.* Spotted-billed duck, *Lath.*

The Damiatta Duck. — White; head, upper part of the neck, ſhoulders, and tip of the tail, black; nape with a ferruginous lunule; wings greeniſh-black. Inhabits Northern Africa.—Anas Damiatica, *Gmel.* and *Haſſelquiſt.* Black-headed duck, *Shaw.* Damiatta duck, *Lath.*

The Unequal Duck. — Specific character, a ſhort emerald creſt; ſecondary quill-feathers blue, at the tips white. The male is black; front green, the reſt of the head and neck white; collar blue green; breaſt and belly ferruginous red; tail ſhort, plumbeous beneath. The female is totally aſh-coloured; quill-feathers blackiſh; two ſmall white ſpots on the wings. Found in the rivers of Oſtrogothia; and is called *diſpar*, irregular or unequal, from the male differing ſo much in colours from the female.—Anas diſpar, *Gmel.* from *Sparrm.*

The Spanish Duck.—Brown; fore-part of the head white; legs blue. Bill, eyes, and longitudinal ſtreak from the chin through the middle of the breaſt and belly, black; chin white; neck rufous; feathers of the belly dirty-white, ſpotted with black at the edge; back and wings black-blue; thighs blackiſh. Inhabits the lakes of Carthagena in America; twenty inches long.—Anas viduata, *Gmel.* Canard à face blanche du Maragnon, *Buff.* Spaniſh duck, *Penn.* and *Lath.*

The Dominican Duck.—Body grey-aſh; face and chin white; band acroſs the eyes, hind-head, neck, and breaſt, black. Bill and legs black; body beneath paler. Twenty-three inches long. Inhabits the Cape of Good Hope.—Anas Dominica, *Gmel.* Canard Dominiquain du Cap, *Sonn.* Dominican duck, *Lath.*

The Pied Duck. — Brown; head and neck reddiſh-white; collar and pectoral band black; ſcapular and ſecondary quill-feathers white. Bill orange

at

at the baſe, the lower mandible duſky; from the crown to the nape a black ſtreak; head and neck inclining to rufous; legs yellow. Female beneath whitiſh; wings with a white ſpot; legs black. Inhabits Labrador; nineteen inches long.—Anas Labradoria, *Gmel.* Pied duck, *Lath.*

The SUPERCILIOUS DUCK. — Grey; eyebrows white; chin and throat dirty-white; wing ſpot green-blue, edged with black. Bill plumbeous, tipt with black; band beneath the eyes white; legs duſky aſh. Inhabits New Zealand; twenty-one inches long.—Anas ſuperciliosa, *Gmel.* Supercilious duck, *Lath.*

The CURVE-BILLED DUCK. — Black; middle tail-feathers (of the male) recurvate; chin with an oval white ſpot; bill hooked. Irids tawny; head, neck, and rump, greeniſh black; five outer quill-feathers white; chin white; wing-ſpot deep ſhining blue. Inhabits the Netherlands; larger than the mallard.—Anas curviroſtra, *Gmel.* from *Pall.* Curve-billed duck, *Latham.*

The HOOK-BILLED DUCK.—Varying in colour; middle tail-feathers (of the male) recurvate; bill curved. Inhabits Europe; and is probably a variety of the tame duck, being ſubject to the ſame variation of colours.—Anas adunca, *Gmel.* A. roſtro incurvo, *Briſſ.* A. boſchas, var. 6. *Turton.* Hook-billed duck, *Will. Ray*, and *Albin.*

The CRESTED DUCK.—Specific character, head creſted; cinereous; throat ſpotted with pale ſtraw-colour; wing-ſpot blue, beneath edged with white; wings and pointed tail black. Bill black; irids red; crown duſky. Inhabits Statenland; twenty-eight inches long.—Anas criſtata, *Gmel.* Creſted duck, *Lath.*

The DUSKY DUCK.—Body above brown, beneath edged with yellow; wing-ſpot blue with a tranſverſe black bar; tail wedged, duſky, edged with white. Bill, crown, primary quill-feathers, and legs, duſky;

neck pale. Inhabits New York; two feet long.—Anas obſcura, *Gmel.* Duſky duck, *Penn.* and *Lath.*

The Iceland Duck.—Creſted; black; throat, breaſt, and belly, white; legs ſaffron-colour. Inhabits Iceland.—Anas Iſlandica, *Gmel.* Hrafn-ond, *Penn.* and *Muller.* Iceland duck, *Lath.*

The Olive Tufted Duck.—Body moſtly dark olive; head, throat, breaſt, and flanks, cheſnut; belly white; rump black; vent ſnowy. Male; head tumid behind, not creſted; irids whitiſh. Female; leſs, dirty-reddiſh where the male is cheſnut; belly whitiſh, waved; back more inclining to rufous. Inhabits the Tanais; ſixteen inches long; feeds on vegetables, ſeeds, and ſometimes fiſh; migrates; fleſh good.—Anas nyraca, *Gmel.* from *Nov. Com. Petrop.*

The Arabian Duck.—Grey ſpotted; beneath, and rump, whitiſh with cinereous ſpots; wing-ſpot blackiſh, white on the fore and hind-part. Bill yellow, black in the middle; legs yellowiſh. Inhabits Arabia.—Anas Arabica, *Gmel.* from *Forſkal.*

The Alexandrian Duck. — Bill and rump black; neck cinereous, with white ſemicircles; belly whitiſh without ſpots. Inhabits Alexandria; legs yellowiſh-aſh.—Anas Alexandrina, *Gmel.* from *Forſk.*

The Egyptian Duck.—Brown; wings above black, beneath white edged with brown; quill-feathers four to twenty, white in the middle. Bill brown, beneath black; chin black; belly and tail-coverts white; legs blue-aſh. Inhabits Alexandria.—Anas gattair, *Gmel.* from *Forſkal.*

Forskal's Duck.—Bill beneath yellow; wing-ſpot obliquely divided, upper half ſilky-green, lower black, before and behind white. Bill lead-colour; chin white; crown brown; back brown, the feathers edged with white; belly whitiſh; legs grey. Inhabits Arabia.—Anas ſirſair, *Gmel.* from *Forſkal.*

The Balbul Duck. — Bill black; wing-ſpot above obliquely green, beneath obliquely black.

Body

Body cinereous; head (of the male) brown; temples with a large reddiſh-green ſpot; rump greeniſh-black; legs cinereous. Inhabits Cahira; is probably a variety of the laſt.—Anas balbul, *Gmel.* from *Forſkal.*

MERGUS, THE MERGANSER.

Generic characters. Bill toothed, ſlender, cylindrical, hooked at the point; noſtrils ſmall, oval, in the middle of the bill; feet four-toed, the outer toe longeſt.

The IMPERIAL GOOSANDER. Body varied with black, brown, and grey; head ſmooth; firſt quill-feathers black; wing-ſpot none; bill and legs reddiſh-white. Inhabits Sardinia; ſize of a gooſe; tongue fringed.—Mergus imperialis, *Gmel.* from *Cetti.*

The FORK-TAILED MERGANSER.—Body black; head ſmooth; hind-head, neck, vent, belly, and lateral tail-feathers, white; front and cheeks pale brown; tail forked. Bill black; dirty-red at the ſides; from the ears each ſide, through the ſides of the neck to the breaſt, a black band. Inhabits Curonia.—Mergus furcifer, *Gmel.* Fork-tailed merganſer, *Turton.*

The BROWN MERGANSER.—Creſted brown, beneath white; chin and breaſt ſpotted with black; wings black with a white band. Hind-head creſted; behind the eyes a white band extending to the nape; lower part of the creſt black; breaſt bluiſh waved with whitiſh; legs yellowiſh. Inhabits Hudſon's Bay; ſeventeen inches and a half long.—Mergus fuſcus, *Turton.*

The BLUE MERGANSER.—Creſted blue; crown and tail black; chin, belly, and ſpot on the wings, white. Bill long, black; legs blue. Inhabits Hudſon's Bay; fourteen inches long.—Mergus cæruleus, *Turton.*

PROCELLARIA,

PROCELLARIA, THE PETREL.

The MARINE PETREL.—Specific character, back and wing-coverts brown; crown and neck bluiſh-aſh; rump bluiſh; cheeks and body beneath white. Under the eyes each ſide a cinereous ſtreak; legs black. Inhabits the Southern Ocean; eight inches and a half long.—Procellaria marina, *Turton.*

The BRASILIAN PETREL. — Above blackiſh; lower part of the neck yellow. Head rounded, tumid; neck long. Inhabits Braſil; ſize of a gooſe; frequents the mouth of rivers, and makes its neſt on the ſhore.—Procellaria Braſiliana, *Gmel.* Puffinus Braſilienſis, *Briſſ.* Puffin de Breſil, *Buff.* Majaque, *Will.* and *Ray.* Braſilian petrel, *Lath.*

PELECANUS, THE PELICAN.

I. *Bill without teeth.*

The PUNCTATED SHAG. — Creſted black; tail rounded; wings dark-aſh ſpotted with black; ſides of the neck with a white line. Bill lead-colour; orbits naked, reddiſh; feathers on the middle of the back and wings with a black ſpot; body above greeniſh-black; varies in having the bill and legs yellow. Inhabits New Zealand; twenty one to twenty-four inches long. — Pelecanus punctatus, *Gmel.* from *Sparrm.* Spotted ſhag, *Turton*, who has ſuppreſſed the P. nævius, to which Gmelin applies that name. They are probably the ſame ſpecies. See vol. v. p. 315, 16.

II. *Bill ſerrate.*

The SAW-BILLED PELICAN. — Brown; tail rounded; gullet pouched, and covered with ſhort cinereous feathers. Bill a foot long, each mandible hooked; pouch very large; legs black. Inhabits Chili; ſize of a turkey; extent of wings nine feet.—Pelecanus thagus, *Gmel.* from *Molina.*

The

The FISHING CORVORANT.—Specific character, tail rounded; body brown, beneath whitiſh ſpotted with brown; throat white, bill yellow, irids blue. Inhabits China, and is there tamed for the purpoſe of catching fiſh. On a large lake, near that part of the Imperial Canal where the river Luen runs into it, Sir George Staunton ſaw "thouſands of ſmall boats and rafts built entirely for this ſpecies of fiſhery. On each boat ſtand ten or a dozen birds, which at a ſignal from the owner plunge into the water; and it is aſtoniſhing to ſee the enormous ſize of the fiſh which theſe birds bring up. They appeared to be ſo well trained, that it did not require either ring or cord about their throats, to prevent them from ſwallowing any portion of their prey, except what the maſter was pleaſed to return to them for encouragement and food. See vol. v. p. 309. The boat uſed for this mode of fiſhing is remarkably light, and is carried on the ſhoulder to the lakes, together with the fiſhing-birds, by thoſe who gain a livelihood by this employment."—Pelecanus Sinenſis, Fiſhing corvorant, *Turton*. Leu-tze, *Staunton's Embaſſy*, ii. 388. Brown pelican or corvorant, *Shaw*.

COLYMBUS, THE GREBE, DIVER, &c.

II. *Feet four-toed, palmate.* DIVERS.

The BOREAL DIVER.—Specific character, above blackiſh, with numerous white ſtellate ſpots; beneath white; neck on the fore-part rufous. Reſembles C. ſtellatus. Killed near Copenhagen. — Colymbus borealis, *Turton*.

III. *Feet four-toed, lobed.* GREBES.

The HALF-CRESTED GREBE.—The creſt on the head ſmall and black; irids light red; bill black and depreſſed; throat cinereous; breaſt and belly of a ſilvery white mixed with cinereous; back and wings

wings black: native of Auſtria.—Colymbus ſubcriſtatus, *Gmel.* from Jacquin.

The PAROTID GREBE.—The head is of a ſhining black; the throat yellow, barred or ſtriped with black; ſides of the neck from the ſhoulders bright ferruginous, aſcending up and terminating on the ſides of the head like ears; back and wings black; breaſt and belly ſpotted with white: diſcovered by Dr. Sparrman.—Colymbus parotis, *Gmelin's Linn.*

The CASPIAN GREBE.—Head ſmooth and gloſſy; all the upper parts of the body duſky brown approaching to black; the under parts of a ſilvery white: inhabits the Caſpian Sea.—Colymbus Caſpicus, *Gmel.*

LARUS, THE GULL.

I. *Noſtrils without a cere.*

The GREAT GULL.—Body ſnowy; head, and as far as the middle of the neck, black; eyelids white. Bill ſcarlet, yellow at the baſe and tip, with a brown ſpot near the tip; mouth red within; irids brown; legs reddiſh-brown. Inhabits the Caſpian Sea; ſize of the bernacle. — Larus ichthyætus, *Gmel.* from *Pallas.* Great gull, *Turton.*

The SIBERIAN GULL. — Body reddiſh-white; head, orbits, and neck, black; back and wings cinereous; legs ſcarlet. Inhabits the ſalt lakes of Siberia; ſixteen inches long.—Larus atricilloides, *Gmel.* from *Falck.*

STERNA, THE TERN.

The BLACK-LEGGED TERN. — Body entirely white; bill and legs black. Inhabits the Cape of Good Hope; length two inches and a half.—Sterna alba, *Gmel.* from *Sparrman.* White-tern, *Turton.* It is probably the ſame with the St. candicans, vol. v. p. 401.

IN

IN THE ORDER OF GRALLÆ.

MYCTERIA, THE JABIRU.

Two ſpecies have been added to this genus ſince our fifth volume was publiſhed.

The INDIAN JABIRU.—White; band over the eyes, lower part of the back, quill and tail-feathers, black. Bill blackiſh, upper mandible gibbous at the baſe, lower tumid beneath; legs fleſh-colour. Inhabits India; feeds on ſhell-fiſh.—Mycteria Aſiatica, Indian jabiru, *Turton's Linn.*

The NEW-HOLLAND JABIRU. — Body above purpliſh-green; beneath neck, and ſhoulders, white. Head purpliſh, ſpotted with white; neck feathered; irids yellow; firſt quill-feathers white; tail black and white. Inhabits New Holland. — Mycteria Novæ Hollandiæ, *Turton*, from a ſpecimen in the Leverian Muſeum.

ARDEA, THE CRANE, STORK, HERON, AND BITTERN.

The generic name *Ardea* is deduced by Blanchard from *arduus*, Lat. becauſe it flies high; Minſhew from *ardo*, to burn, becauſe of the hot quality of its dung; others from the city of *Ardea*, from whoſe ſcattered embers this bird, according to Ovid, is generated; or from ἀηρ, the air, and δυω, Gr. to penetrate. In the firſt, ſecond, third, and fifth, diviſions of this genus, we have nothing to add to what is contained in our fifth volume, p. 430 to the end.

IV. Herons and Bitterns. *Middle claw ſerrate inwardly.*

The WREATHED HERON. — Specific character, ind head black, creſted; back brown; neck and elly dirty-white; breaſt black with yellowiſh lunules. nhabits South America.—Ardea torquata, *Gmel.* om *Miller.* Wreathed heron, *Turton.*

The Dusky Heron.—Specific character, creſt on the hind-head of one feather; body above greeniſh, beneath cheſnut, longitudinally ſtriped with white and ferruginous; quill-feathers with a white ſpot at the tip. Bill recurved, greeniſh-black; feathers of the creſt white; front, crown, and nape, duſky-cheſnut; back and wing-coverts duſky-cheſnut and gold-green; legs ſhort, greeniſh. Inhabits Sclavonia; ſize of Ardea ſtellaris.—Ardea obſcura, *Turton.*

The Cayenne Night-heron. — Cinereous; head black, crown white; creſt unequal, of ſix feathers, half white, half black. Bill black; lores pale green; a white line from the noſtrils beneath the eyes to the hind-head; body bluiſh-aſh; quill-feathers black; legs yellowiſh. Inhabits Cayenne; twenty-one inches long.—Ardea Cayennenſis, *Gmel.* Cayenne night-heron, *Lath.*

The Crested Purple Heron. — Hind-head black; creſt pendent, of two long feathers; body olive, beneath purpliſh. Bill brown tipt with duſky, beneath yellowiſh; creſt black; orbits naked yellowiſh; from the angle of the mouth to the hind head a black ſtreak; chin white; upper half of the neck rufous, with three longitudinal black lines, the reſt olive behind, rufous at the ſides, and reddiſh on the fore-part; the feathers long, narrow, each with a black ſpot; a black band from the middle of the breaſt to the vent; lower tail-coverts white, mixed with rufous and tipt with black; angles of the wings rufous; quill-feathers duſky; legs greeniſh. Inhabits Aſia; two feet ten inches long.—Ardea purpurea, *Gmel.* A. criſtata purpuraſcens, *Briſſ.* Heron pourpré, *Buff.* Creſted purple heron, *Lath.*

The Brown Heron. — Creſt blackiſh; body blackiſh-brown, beneath white; breaſt with long brown ſpots. Inhabits Cayenne; two feet and a half long. Bill brown; legs yellow.—Ardea fuſca, *Turton.*

The

The WHITE-FRONTED HERON. — Specific character, ſubcreſted; lead-cinereous, beneath ruſty-rufous; face beyond the eyes, chin, and throat, white. Bill black, the baſe underneath yellowiſh; lores and orbits naked, greeniſh; legs yellow-brown; feathers of the crown long, black; cheeks, chin, front, and fore-part of the neck as far as the middle, white; feathers of the cheſt long. Inhabits New Holland; twenty-eight inches long.—Ardea Novæ Hollandiæ, *Turton.*

The BLUISH HERON. — Creſted; body duſky-blue; head and neck rufous-brown; hind-head with two long feathers. Bill pale yellow; lores red; legs brown. Inhabits Cayenne: nineteen inches long.—Ardea cæruleſcens, *Turton.*

The RED-CRESTED HERON.—Hind-head with a red pendent creſt; body white. Inhabits Chili.—Ardea erythrocephala, *Gmel.* from *Molini.*

The CHILIAN HERON.—Hind-head creſted, and, with the reſt of the body, white. Inhabits Chili.—Ardea Thula, *Gmel.* from *Molini.*

The BLUE-HEADED HERON. — Crown creſted, and, with the back, blue; wings black edged with white. Bill black; belly yellow-green; tail green; legs yellow. Inhabits Chili.—Ardea cyanocephala, *Gmel.* from *Molini.*

The SNOWY HERON. — Snow-white; bill and legs blackiſh; eyes and toes yellow; creſt very long, ſhading the hind-head, neck, breaſt, and back. Inhabits near Carthagena in America; leſs than Ardea ſtellaris.—Ardea candidiſſima, *Gmel.* from *Jacquin.*

The GALEATED HERON. — Hind-head ſubcreſted; body milk-white; bill pale yellow; legs ſcarlet. Inhabits Chili; two feet ſeven inches high; bill four inches long.—Ardea galeata, *Gmel.* from *Molini.*

The SPOTTED HERON.—General colour brown; hind-head black, ſubcreſted; long quill-feathers

blackiſh, tipt with white; ſhoulders ſtreaked with white. Bill and legs deep brown; behind each eye a ſmall oblong black patch; cheeks and ſides of the neck pale ruſty; throat and fore-part of the neck white, thickly ſpotted with black; body beneath pale brown; thighs with minute longitudinal black ſpots; long quill-feathers with a white ſpot at the tip; tail black. Inhabits South America.—Ardea nævia, *Turton*, from *Cim. Phyſ.* 70. *tab.* 36.

The Collared Heron.—Black; collar white; legs and two ſpots on the yellow bill black. Inhabits about Bononia; ſize of a curlew.—Ardea Bononenſis, *Gmel.* A. nigra torquata, *Briſſ.* Bird akin to the heron, *Ray.* and *Will.* Collared heron, *Latham.*

The Black-crested Heron. — Hind-head creſted; body white; crown black. Bill brown; legs pale yellow; lores grey-green. Inhabits Guiana; about three feet ſix inches long.—Ardea pileata, black-creſted heron, *Turton.*

The Barred Heron. — Head ſmooth; body above black, waved with tranſverſe ferruginous lines; beneath whitiſh; quill and tail-feathers with ferruginous bars. Bill blackiſh; tongue very narrow, grooved; pupil red; head and beginning of the neck black with white ſtreaks; rump with tranſverſe white lines; ſeven of the tail-coverts with a large white ſpot at the tip; tail blackiſh, ſtreaked with white and two ferruginous bands. Inhabits South America; ſixteen inches long; feeds on ſmall fiſh and inſects, and expands the tail like a peacock. —Ardea helias, *Gmel.* from *Pallas.* Petit paon des roſeaux de Cayenne, *Rozier.* Oiſeau du ſoleil, *Firmin.* Caurale, ou petit paon des roſes, *Buff.* Caurale ſnipe, *Lath.* Barred heron, *Ency. Lond.*

The Variegated Heron.—Body ferruginous ſpotted with brown, beneath paler, front black, chin white; thighs rufous, legs brown.—Ardea variegata, *Turton.*

The

The SPOTTED HERON. — Chief colour brown; neck above and upper part of the back ſpotted with white; head ſmooth; lores naked, greeniſh. Bill brown, beneath greeniſh-yellow; quill-feathers with a black ſpot at the tip; legs greeniſh-brown. Inhabits the fens of Europe; eighteen inches and a quarter long.—Ardea maculata, *Gmel.* Botaurus nævius, *Briſſ.* Butor tacheté, ou Pouacre, *Buff.* Schwarzer reiger, *Friſch.* Spotted heron, *Latham.*

TANTATUS, THE IBIS.

New lights have been thrown upon the natural hiſtory of the ibis. M. Savigny, in his Natural and Mythological Hiſtory of the Ibis, (Paris 1805.) appears to have eſtabliſhed the identity of both the white and the black ibis, on grounds that cannot eaſily be diſputed. Having noted the principal circumſtances on this ſubject that are mentioned by Herodotus and Pauſanias, he ſhortly reviews the various and jarring opinions of modern naturaliſts and travellers; and he aſſigns to Bruce, the celebrated explorer of Abyſſinia, the merit of having aſcertained the true white ibis, to which, in accordance with M. Cuvier, he applies the deſignation Numenius Ibis. On comparing it with that which is deſcribed by Herodotus, he finds the coincidence ſufficiently exact: but he ſhows, by arguments drawn from its external and internal organization, that *it is not a devourer of ſerpents.* "At laſt," ſays he, "I arrive at poſitive proofs; for, on opening the gizzard, in order to examine the contents of its inner membrane, I found it wholly filled with univalve and river ſhells, moſtly of the genus Cycloſtoma, and of a ſpecies which is common in the canals and flooded fields. The ſhells were ſometimes leſs than an inch in diameter; and yet, when the molluſca had not been digeſted, they were nearly entire. I preſume that the bird always ſwallows them thus, and that its bill

is

is not ſtrong enough to break them, but that the muſcle of the ventricle is more than ſufficient for the purpoſe. I have even learned from obſervation, that, of birds which frequent the ſhores of rivers, thoſe ſpecies that have a ſtrong and very muſcular ventricle, although furniſhed with a bill capable of killing reptiles or other large animals, prefer ſhells to every other nouriſhment. I find an example of this in the crane; and I can atteſt the fact that, in the ſame places, and at the ſame period, the ſtrong gizzard of this bird was always full of ſhells; while the almoſt membranous ſtomach of the heron and of the black ſtork contained only fiſh." M. Savigny adds, that the preſent inhabitants of Egypt are total ſtrangers to the ſuppoſed propenſity of the ibis to feed on ſnakes; and that they affirm that they never ſaw either ſpecies make uſe of any other food than fiſh, worms, ſhells and ſometimes a little grain. The circumſtance of ſhreds of ſerpents being ſometimes found in mummies, along with relics of the ibis, may be owing to accident, or to ſeveral ſerpents having been reckoned among the ſacred animals, and conſequently their remains having been preſerved; but can never prove that they conſtituted the food of the bird which they accompany.

The ibides are now reckoned among thoſe birds which *do not breed in Egypt.* If we may credit the inhabitants, the arrival of the white ſpecies coincides with the firſt riſe of the Nile; their numbers ſeem to increaſe with the waters of the river, and to diminiſh with them; and all diſappear when the inundation has ceaſed. Hence, we may fix their migration about the 19th of June, which nearly correſponds to the time aſſigned by Bruce for their arrival in Ethiopia. It ſhould ſeem that they remain in Egypt, at leaſt in the Delta, about ſeven months; ſince ſome ſtragglers were ſtill perceived at Kafr-Abou-Said on the 14th of January. The black ibis probably

bably remains the ſame length of time, but it arrives and returns later. We may preſume that theſe birds firſt reſort to the lower parts of the country, which are the ſooneſt flooded, and that they find their firſt ſubſiſtence in the interior of the Delta: but, as the water acquires depth and expanſion by the daily progreſs of the inundation, they are obliged to retrogade to the higher grounds, when they approach the Nile, and haunt the rice-fields, or lucerne, adjoining to villages, or the banks of canals, or the ſmall mounds which incloſe moſt of the cultivated ſpots. When the waters, having attained their higheſt elevation, begin gradually to ſubſide and retire, the ibis follows their courſe, and alſo retires from them ſlowly. This is the favourable ſeaſon for catching theſe birds, and that which the fowlers prefer for ſpreading their ſnares, until the ſpecies really abandons Egypt; for the individuals diſappear in quick ſucceſſion, except a few which return to the heart of the Delta; whence, however, they depart, when the waters begin to be heated or corrupted by blending with thoſe of the lakes.

The CARIBBEAN IBIS. — Face and bill yellow fleſh-colour; legs pale fleſh-colour; body white; three outer quill-feathers tipt with black. In other reſpects it greatly reſembles the white ibis, and Dr. Turton places it as a variety of that ſpecies. It inhabits the Caribbee Iſlands; length twenty-two inches.—Tantalus coco, *Gmel.* from *Jacquin.* T. albus, var. 2. *Turton.*

The CHILIAN IBIS.—Face, bill, and legs, brown; body white; quill and tail-feathers black. Neck three feet long; bill large, pointed, convex, four inches long, naked at the baſe; chin pouched, naked; plumage white varied with black; legs and thighs two feet eight inches long. Inhabits near rivers and lakes in Chili; ſize of a gooſe; builds in the ſedge, lays two bluiſh-white eggs.

SCOLOPAX,

SCOLOPAX, THE CURLEW, WHIMBREL, &c.

The WHITE-HEADED CURLEW.—Bill red; legs black cinereous; head and neck white; body blue; quill-feathers black. Inhabits the Cape of Good Hope. — Scolopax leucocephala, *Gmel.* White-headed curlew, *Lath.*

The HUDSONIAN CURLEW. — Bill black; legs blue; body brown, ſpotted with white; belly white; crown cheſnut-brown, with a longitudinal white line in the middle. Eyebrows white; rump the colour of the back. Inhabits Hudſon's Bay; a foot long.—Scolopax Hudſonica, *Turton.*

The CASPIAN SNIPE. — Arched bill and legs black; head, neck, and ſpurious wings, brown waved with pale ruſty; body above cinereous, beneath pale ruſty; chin, vent, and rump, white. Lower mandible ſhorter; tongue long, arrow-ſhaped, entire; eyes brown; orbits whitiſh; lores brown; rump and vent with brown ſpots; tail rounded, brown-aſh. Inhabits the Caſpian Sea; eight inches long.—Scolopax *Gmel.* from *Nov. Com. Petrop.*

The SAVANNA WOODCOCK. — Bill and legs brown; lores and eyebrows black; body black, varied above with rufous, beneath with whitiſh. Body beneath varied with black ſpots. Inhabits the ſavannas of Cayenne; leſs than the common woodcock.—Scolopax paludoſa, *Gmel.* Becaſſe des ſavanes, Becaſſe de Cayenne, *Buff.* Savanna woodcock, *Latham.*

The FINMARK SNIPE.—Bill ſtraight, tuberculate; legs yellow; head grey; body variegated. Inhabits Finmark; reſembles the common ſnipe.—Scolopax gallinaria, *Gmel.* from *Zool. Dan.* Finmark ſnipe, *Penn.* and *Lath.*

The DUNLIN.—Bill ſomewhat bent; belly, rump, and ſides, white; back, and wing and tail coverts, ferruginous

ferruginous with white lines. Inhabits England and Siberia. This is ſuppreſſed by Dr. Turton, being probably included by him with ſome other ſpecies.—Scolopax puſilla, *Gmel.* from *Falck.* Dunlin, *Will. Ray, Penn.* and *Lath.*

The CASPIAN SNIPE.—Bill ſtraight, purple; legs fleſh-colour; head cinereous; quill-feathers black-grey. Inhabits the ſhores of the Caſpian Sea.—Scolopax obſcura, *Gmel.* from *S. G. Gmel.*

The CHINESE SNIPE.—Variegated with bluiſh, brown, rufous, and black; eye-brows, line on the crown, chin, and belly, white. Bill long, brown-yellow; body above finely waved; neck above brown, with tranſverſe black lines, beneath whitiſh, with longitudinal white ſtreaks; wings and tail with reddiſh ſpots; legs grey. Inhabits China; ten inches long.—Scolopax Sinenſis, *Turton.*

The CURONIAN GODWIT. — Spotted with grey; wings and bill blackiſh, the lower mandible from the baſe to the middle ſcarlet; legs brick-duſt colour. Inhabits Curonica. — Scolopax Curonica, *Gmel.*

The MARBLED GODWIT. — Variegated with blackiſh and pale rufous ſpots; middle of the belly, eyebrows, and chin, whitiſh; breaſt waved with brown; quill-feathers reddiſh, the four firſt without tipt with black. Bill black, a little turned up, and reddiſh at the baſe; legs black; tail with blackiſh-brown bars. Inhabits Hudſon's Bay; ſixteen inches long.—Scolopax marmorata, *Turton.*

TRINGA, THE LAPWING, SANDPIPER, &c.

The GREATER LAPWING. — Black, beneath whitiſh; head and neck above cheſnut; throat and breaſt with ferruginous ſpots; tail black. Bill yellowiſh tipt with black; legs pale yellow. Inhabits near Bononia; larger than the common lapwing.—Tringa Bononienſis, *Gmel.* Greater lapwing, *Lath.*

The Welsh Sandpiper. — Blackiſh-aſh; chin and middle of the belly white; baſe of the bill and legs red. Bill ſlender, tapering, a little curved; irids hazel; head and neck duſky black; eyelids whitiſh; back and ſcapulars black edged with aſh-colour; wing-coverts black tipt with white; quill feathers black, ſlightly edged with white on the outer webs, the ſhafts white; body beneath white, ſpotted with black, except the middle of the belly and vent; rump black; two middle tail-feathers black, outer one cinereous, the reſt duſky. Inhabits Glamorganſhire and Carmarthenſhire; eight inches and a half long.—Tringa nigricans, Welſh ſandpiper, *Turton.* from *Linn. Tranſ.* iv. 40.

The Pitchy Sandpiper. — Head and neck black; back and wings browniſh mixed with black; breaſt and belly cinereous; rump cinereous, waved with white and black. Inhabits the banks of the Rhine.—Tringa atra, *Gmel.* Pitchy ſandpiper, *Turton.*

The Chevalier Sandpiper. — Legs greeniſh; back varied with brown; belly and rump white. Body waved with grey, rufous, and brown; tail rufous-brown, the two middle feathers barred with black; bill and feet blackiſh. Inhabits Europe; twelve inches long.—Tringa equeſtris, *Turton.* It is probably a variety of the ochropus.

The Small Dusky Sandpiper.—Bill and legs black; body grey, beneath and face white, lores grey. Inhabits the ſandy ſhores of Europe and the Caſpian Sea.—Tringa arenaria, *Gmel.* from *Will.* and *Ray.* Calidris griſea minor, *Briſſ.*

The Dusky Sandpiper.—Bill and legs blackiſh; body beneath olive; rump variegated. Bill pale at the baſe; body above black-brown; tail-feathers grey-brown, and, except the two middle ones, edged with white. Inhabits Europe; nine inches and a quarter long.—Tringa calidris, *Gmel.* from *Briſſ.*

Ruſticola

Ruſticola ſylvatica, *Geſner.* Maubeche, *Buff.* Duſky-ſandpiper, *Latham.*

CHARADRIUS, THE PLOVER.

The TARTARIAN PLOVER. — Neck cinereous; breaſt ferruginous; band on the chin and breaſt black; belly white; wings and tail brown. Inhabits near the ſalt lakes of ſouthern Tartary.—Charadrius Tartaricus, *Turton's Linn.*

The WHITE-COLLARED PLOVER. — Above brown, beneath white; breaſt black and white; tail varied with rufous, whitiſh, and blackiſh; bill black; collar and legs white. Irids orange; joints of the toes duſky; claws black. Inhabits Jamaica, near the banks of rivers; eight inches long. — Charadrius Jamaicenſis, *Gmel.* Pluvialis Jamaicenſis torquata, *Briſſ.* Greateſt ſnipe, *Ray* and *Sloane.* Collared ſnipe, *Turton.* It is probably a variety of the noiſy plover, vol. vi. p. 96.

The RUSTY-CROWNED PLOVER.—Brown-waved; front, neck beneath, and belly, white; annular ſtripe on the head ferruginous; breaſt and band on the crown black. Bill and legs blackiſh; body beneath white; circular ſtripe on the head reſembling a crown, which is wanting in the female. Inhabits Falkland Iſlands; ſeven inches and a half long.—Charadrius Falklandicus, *Turton.*

The SANDERLING, or CURWILLET. — Bill and legs black; lores and rump greyiſh; body beneath white without ſpots. The var. β has the body cinereous varied with brown; wing-coverts black edged with cinereous the greater cinereous, edged with white; quill-feathers and tail duſky. Both inhabit the ſandy ſhores of Europe and America; and are about eight inches long. Front and cheeks whitiſh; band acroſs the eyes grey; head, neck and body above black-ſtreaked; feathers of the back and ſcapulars browniſh-grey, edged with whitiſh; wing-coverts

and quill-feathers duſky tipt with white, the ſhafts of the latter partly white; tail cinereous with a paler edge.—Charadrius calidris, *Gmel.* Sanderling, or curwillet, *Penn.* and *Lath.*

The SIBERIAN PLOVER. — Front varied with white and black; crown barred with blackiſh; breaſt brown, terminated by a white band; belly ferruginous. Inhabits Siberia. — Charadrius Sibiricus, *Gmel.* from *Lepechin.*

The CREAM-COLOURED PLOVER. — Browniſh with a pale ſtripe through the eyes; quill-feathers, ſpot behind the eyes and near the tip of the lateral tail-feathers, black. Bill black; legs yellowiſh; ſides of the head and chin whitiſh; crown rufous; tail grey-brown, and except the two middle feathers with a black ſpot near the end and tipt with white. Inhabits Europe, though very rarely; ten inches long. —Charadrius gallicus, *Gmel.* Coure-vite, *Buff.* Cream-coloured plover, *Latham.*

Dr. Turton's var. 2. is reddiſh-yellow; ſides of the head, chin, and belly, paler; behind the eyes a duſky ſpot; wings and lateral tail-feathers near the tip black. This bird was once ſhot in Kent. Body with a few waved duſky ſtripes; cap ruſty-brown, with minute blackiſh ſpots; four firſt quill-feathers at the tip very ſlight rufous. Probably the other ſex.

The CURONIAN PLOVER.—White; bill blackiſh; band on the crown and ſemicircle on the front white; cap cinereous; band through the eyes blackiſh-waved; back, wings, and tail, cinereous; legs reddiſh. Inhabits Curonia.—Charadrius Curonicus, *Gmel.*

The VARIEGATED PLOVER.—Above varied with cinereous, black, and white; beneath white; band beneath the eyes dotted with black; bill and legs blackiſh.—Charadrius nævius, *Gmel.*

FULICA, THE GALLINULE, COOT, &c.

The VIOLET GALLINULE.—Colour dark violet; neck beneath blue; front and legs red; vent white. Inhabits moſt temperate and warm places; perhaps a variety of the purple gallinule, vol. vi. p. 122.—Fulica violacea, *Turton.*

PARRA, THE JACANA.

The St. DOMINGO JACANA. — Claws moderate; legs yellow. Bill yellow; caruncle lax, pale yellow; head and body above pale yellow, beneath ochre inclining to roſy. Inhabits the warm parts of America; eleven inches long.—Parra Dominica, *Gmel.*

The LOUISIANA JACANA. — Bill and caruncle tawny; crown black; body above grey-brown, beneath ochre. Quill-feathers black, mixed with a little grey; tail pale yellow, tipt with black; legs red; claws black. Inhabits Louiſiana; eleven inches long.—Parra Ludoviciana, *Gmel.* Louiſiana, ſandpiper, *Lath.*

The CAYENNE JACANA. — Legs reddiſh; hind-head brown, with a blackiſh creſt. Bill red, tipt with black; front and chin black; middle of the crown cinereous; breaſt with a broad, black band; belly and vent white; back greeniſh-purple; wings white without; tail from the baſe to the middle white, the reſt black, the tip edged with white. Inhabits Cayenne; feeds on inſects; eight inches and a half long. —Parra Cayennenſis, *Gmel.* from *Buff.* Cayenne ſandpiper, *Lath.*

The GOA JACANA.—Caruncle red; legs yellow; head, neck, wings, and middle of the tail, black; body beneath white. Bill duſky; from the hind-part of the eye a black ſtreak runs through the ſides of the neck as far as the breaſt; back and wing-coverts reddiſh-brown, the greater ones white; tail white at the baſe, and tipt with brown. Inhabits near Goa;

thirteen

thirteen inches long.—Parra Goenſis, *Gmel.* Vanneau armé, *Buff.* Goa ſandpiper, *Lath.*

The SENEGAL JACANA. — Claws moderate; legs red. Bill yellowiſh-green, tipt with black; front white; caruncle lax, pale yellow; chin and throat black; lower part of the belly, tail-coverts, and greater wing-coverts, whitiſh; quill-feathers black, tipt with white; ſpur on the wings black; tail from the baſe to the middle whitiſh, the reſt black, tipt with reddiſh; reſt of the body and head grey-brown. Inhabits near the Senegal; twelve inches long.—Parra Senegalla, *Gmel.* Vanneau armé du Sénégal, *Buff.* Senegal ſandpiper, *Lath.*

RALLUS, THE RAIL.

The DOUBTFUL RAIL.—Striped with brown and ferruginous; belly white; flanks barred with brown and ruſty-aſh; firſt quill-feathers without, longitudinally white. Face pale ruſty; chin dirty-white, ſurrounded with a broad brown collar; ſides brown; bill and legs greeniſh-black. Inhabits Poſegan; ſize of the common gallinule.—Rallus dubius, *Turton.*

IN THE ORDER OF GALLINÆ.

CRAX, THE CURASSOW.

The GALEATED CURASSOW. — Crown with a horny cone; body black; vent white. Bill and legs red. Inhabits the Iſland of Curaſſow; near as large as a turkey.—Crax galeata, *Turton.*

PHASIANUS, THE PHEASANT.

The VARIEGATED PHEASANT. — Black; front red; neck and back gloſſy-green; tail compreſſed, aſcending, the coverts hanging down each ſide. Caruncle includes the eyes, and is continued upwards into a plain comb, and downwards into an obſcurely-divided wattle; feathers of the neck and upper part of

of the back diſpoſed ſo as to reſemble a kind of ſcales or ſhells; ſmaller wing-coverts black, lanceolate, deeply edged with bright orange-yellow; tail-coverts ſhed each ſide, long, narrow, pointed, black, the edges ochre; bill and legs yellowiſh. Inhabits India; leſs than the common cock.—Phaſianus varius, *Turton, Nat. Miſcel.* 353.

NUMIDA, THE PINTADO, OR GUINEA HEN.

The EGYPTIAN PINTADO. — Black, ſpotted with bluiſh; crown creſted; head and neck rufous. Bill reddiſh; legs bluiſh-black; head and neck with a few hairs; cheeks and caruncles each ſide the jaws bluiſh. —Numida Ægyptiaca, *Turton.*

TETRAO, THE GROUSE, PARTRIDGE, &c.

The LAPLAND GROUSE. — Toes naked, ſcaly; back black, varied with ruſty; neck ferruginous, ſpotted with black; breaſt and vent white. Female ſpotted with pale yellow; primary quill-feathers black; thighs white, with ruſty ſpots; legs downy; eggs reddiſh, with large brown ſpots. Inhabits the alpine parts of Lapland; ſize of a hen.—Tetrao Lapponicus, *Gmel.* Rehuſak, *Penn.*

The ASIATIC PARTRIDGE. — Variegated with reddiſh-yellow, brown, and black; beneath whitiſh, with black ſtripes. Bill ſhort, obtuſe, brown, lower mandible pale; head and chin yellow-brown; feathers of the body beneath with two black bands; quill-feathers yellowiſh-rufous, varied with brown; legs reddiſh. Inhabits Mahratta; ſix inches long.—Tetrao Aſiaticus, *Turton.*

The GUZERAT QUAIL.—Yellowiſh-rufous, with deeper waves; back-toe unarmed. Bill ſtrong, ſhort, pale; body beneath pale; legs yellow. Inhabits India in Guzerat; ſix inches long.—Tetrao Cambaienſis, Guzerat quail, *Turton.*

IN

IN THE ORDER OF PASSERES.

COLUMBA, THE PIGEON.

Vaillant wiſhes to diſtribute the ſpecies of this genus into three diviſions, or families, the characters of which he conſiders as ſufficiently diſtinct to form even three genera, ſhould that be hereafter thought adviſeable.

In the firſt family, or diviſion, he would include, under the name *Colombe*, all pigeons properly ſo called, i. e. thoſe commonly known in their domeſtic ſtate, whatever might be their ſuppoſed origin; wild pigeons, or ring-doves, or wood-pigeons; and laſtly, turtle doves.

In the ſecond, under the name of *Colombar*, he includes all the ſpecies with thick bills, the mandibles ſwelling out like the Buphaga, or beef-eater; their legs are ſhort and thick, their toes broad and flat, partly united at the baſe, and forming a foot like thoſe of the hornbills and kingfiſhers. They are farther diſtinguiſhed by having much yellow and green in their plumage, whereas neither the domeſtic nor the wild pigeons of Europe or of America have any ſcarcely of thoſe colours. The Parrot-pigeon, vol. vi. p. 455, is one of the ſpecies which would belong to this diviſion. All the ſpecies live entirely on fruit, and never quit the large woods.

In the third diviſion, under the name of *Colombi-galline*, he would include thoſe ſpecies which form a connecting link between the pigeon and ſome genera of the gallinaceous order, having ſome characters of each, and the habits of the latter: the ſpecies of this diviſion are leſs numerous than of the two former: one of them is the Great Crowned Pigeon; and another is the Nicobar Pigeon, vol. iv. p. 447, 464.

M. Vaillant concludes by obſerving, that, of theſe three

three diviſions, not one ſpecies belonging to the ſecond and third is to be found in a ſtate of nature in Europe; in the New World none of the ſecond; but in Hindooſtan and Africa ſpecies of all three occur.

The OLIVE-PIGEON.—This belongs to Vaillant's firſt diviſion, and is the ſpecies noticed under the head Long-tailed Eagle, p. 40 of this volume. Its cry, when on the wing, reſembles the creaking of a pulley when raiſing a great weight, and this delightful note the eagle takes advantage of to pounce upon its prey, as we have fully deſcribed in the place above quoted. But this cry is heard only morning and evening; during the heat of the day, the pigeon remains perched in tranquillity on the higheſt trees, or ſeeking out a kind of wild olive-tree, the fruit of which it prefers to all other; and hence its name, *olive-duyf*, olive-pigeon. Theſe olives, which are as large as thoſe of Europe, the bird ſwallows whole; they grow in many parts of the eaſt coaſt of Africa; and, wherever they are met with, we are ſure to find this ſpecies of pigeon.

The olive-pigeon is about the ſize of the Ring-pigeon of Europe, already deſcribed, vol. vi. p. 458. but the colours are extremely different. The top of the head is a lively blue-grey with a vinous tint; the front of the neck and the breaſt are brown with ſcollops of wine-lees and triangular ſpots of white; ſimilar ſpots are ſcattered all over the upper wing-coverts, the ground-colour of which is alſo brown tinted with vinous red; the wing and tail feathers are blackiſh inclining to grey on the outer barbs. The bill, feet, and nails, are yellow; the eyes pearl-colour, ſurrounded by a patch of naked ſkin which is orange-colour, and extends farther below the eye than above it.—The female is ſomewhat leſs, and has fewer white ſpots on her plumage.

The olive-pigeon is very frequent in the foreſts of the Auteniquois country. In the ſeaſon of love,

they ſeparate into ſingle pairs; but at other times they go in flocks. They build in trees, like our wood-pigeons, and lay two very white eggs; the young are hatched on the thirteenth or fourteenth day, and are very delicate eating. Though they come into the level country, and feed upon grain, they are always in the neighbourhood of great woods.—Ramier rameron, *Vaillant*, N° 264.

The Rough Pigeon. — This beautiful ſpecies belongs to ſouthern Africa; but in thoſe parts where it was ſeen by Vaillant, it appeared but as a bird of paſſage, having raiſed its young elſewhere; nor could he ever find that it made a neſt in that country, the Great Namaquois, where indeed the flocks arrived not till near the end of December, and made a very ſhort ſtay. They rooſt in the woods, but come in great number into the open country in the day-time, and feed upon berries and ſeeds, eſpecially the ſeeds of Convolvulus, or bindweed, which is very plentiful in the Namaquois country.

All the plumage of the top of the head and of the neck and breaſt are white, with thin hairy barbs; and each feather ends in a long filament, ſo that in the male they form a kind of full-bottomed wig with a high foretop; and, as the bird can erect all theſe filaments completely, it then looks like an angry porcupine. The cheeks, and the baſe of the bill, which are naked, are of a bright red colour; the tail is red, except at the ſides and at the origin of each feather, which are purple; the reſt of the plumage is indigo-blue, very ſhining on the upper ſurface, duller and browniſh underneath. The bill is of three colours; yellow at the tip, brown farther back, and near the head red; the feet are vinous red, the legs entirely covered with feathers down to the toes; the eyes are gold-yellow. The male is about the ſize of the ſtock-pigeon, or of the variety called *biſet*, (vol. vi. 437.) The female is leſs, her colours duller, and the filaments

ments of the head and neck feathers not ſo long. This ſpecies occurs alſo at Senegal.—Ramier hériſſé, *Vaillant*, N° 267.

The BROWN PIGEON. — Cap, neck above, back, and wing-coverts, brown; breaſt, neck beneath, and rump, ſhining green. Bill and legs red. Inhabits New Zealand.—Columba brunnea, *Turton*.

The BRONZE-WINGED PIGEON. — Browniſh, edged with rufous; front and chin white; a bifid copper-gold bar on the wings, and a black one near the tip of the tail. Bill and legs red; lores white; body above aſhy-brown, beneath paler, all the feathers edged with tawny; leſſer wing-coverts brown, with a few copper-gold oval ſpots, the reſt with an oval copper-gold ſpot at the tip, forming a tranſverſe bifid bar; quill-feathers brown, within rufous; two middle tail-feathers brown, the reſt pale lead-colour. Inhabits Norfolk Iſland; ſize of the ſtock-pigeon.—Columba chalcoptera, *Turton*, from *Philips's Bot. Bay*.

The ANTARCTIC PIGEON. — Grey lead-colour, beneath paler; hind-head with a pendent ferruginous creſt; wings and tail blackiſh, the latter with a pale bar. Bill and legs red, lower mandible with a bluiſh tip; front and chin bluiſh; body beneath with a pale reddiſh tinge. Inhabits New Holland; ſize of the ring-dove.—Columbá antarctica, *Turton* from *New Holl. Zool.*

The ROSY PIGEON. — Sanguine-roſy; cere orange; crown, orbits and tips of the ſmaller coverts white; wings and tail brown. Bill and legs yellow-brown; orbits white, imbedded on the fore-part with black, which colour runs juſt over the cere, ſo as to form a black frontlet; irids yellow; body beneath paler. Inhabits India; ſize of the common pigeon. —Columba roſea, *Turton* from *Cim. Phyſ.*

The WHITE-FACED TURTLE DOVE.—Naturaliſts have diſtinguiſhed the turtle-doves from the pigeons

by this quality: they ſay that the turtle-doves live in flocks, the pigeons not. But Vaillant aſſerts that the contrary is the fact; for that turtle-doves are never ſeen in large flocks, unleſs when on a journey; whereas, after the pairing-ſeaſon is over, very conſiderable flocks of pigeons and ſtock-doves may be ſeen. If many turtle-doves are ſeen together, it is merely becauſe they have been attracted by ſome food they are particularly fond of; but, when diſturbed, every pair takes a different direction; whereas, if you ſcare a flock of pigeons, they fly off in a compact body, and all perch on the ſame tree, or alight together on the ground.

It has been well obſerved, vol. vi. 466, that "the turtle, perhaps more than any other bird, loves coolneſs in ſummer;" and accordingly, ſays Vaillant, in the burning deſerts of Africa, theſe were always birds of good omen to myſelf and company; for if, when almoſt dying with thirſt, we chanced to ſee a pair of turtle-doves, we were ſure to find not far off a ſpring or a collection of rain-water, of which we always availed ourſelves with gratitude; I mean, that we never offered any violence or diſturbance to thoſe kind harbingers.

Thus much of turtle-doves in general.—The preſent ſpecies was diſcovered by Vaillant only in the Auteniquois country. The forehead, cheeks, and throat, are entirely white; the neck, breaſt, mantle, and rump, are red brown, varied with purple, green, and ſteel blue, according to the different reflections of the light. The under parts are all red. The wing and tail feathers, on a blackiſh ground, are edged with bluiſh-grey; the bill is bluiſh, the legs vinous red, the eyes orange. The female has a plumage leſs bright.

This ſpecies is met with only in large woods; it is hard to ſhoot, becauſe, keeping always on the ground, it is not eaſily diſcerned among the bruſh-wood; and,

and, even when raiſed, it often flies off undiſcovered, though with a great noiſe; becauſe it moſtly perches on the low branches of trees, or in buſhes, in the midſt of which it makes a flat neſt, which never contains more than two eggs of a dirty-white colour.—Tourterelle à maſque blanc, *Vaillant*, N° 269.

The MAILED TURTLE. — Head and neck of a light vinaceous colour; breaſt reddiſh, agreeably varied with zig-gag lines like the looſe meſhes of a net, or the rings which form a coat of mail, whence the name. The under parts are perlaceous grey, which, becoming lighter on the poſterior, is perfectly white on the under tail-coverts. The mantle is reddiſh, and the middle of the great wing-coverts, but the interior parts are of a bluiſh grey; the great wing and tail-feathers are blackiſh within, their outer barbs bordered with grey. The bill is dark brown, but yellowiſh at the tip; the eyes orange-colour, the feet light red. The female is rather leſs, and her colours not ſo bright.

This ſpecies inhabits the weſt coaſt of Southern Africa; firſt appearing about Mount Camis, and thence to the Great Namaquois; it occurs on all the borders of the Kauffi and the Swart-dooren; but is no-where ſo plenty as on the confines of the Great or Orange River, and the Lion River, near the Cape of Good Hope: they occur at Senegal alſo. They neſtle on trees, like our turtle-doves, and lay two white eggs; they reſemble the common European turtle-dove in ſize, and in their cooing notes. Vaillant ſays that this ſpecies is deſcribed by Briſſon under the name of Tourterelle du Bengale, and that Buffon makes it a variety of the European turtle-dove.—Tourterelle maillée, *Vaillant*, N° 270.

The EMERALD TURTLE. — Specific characters, emerald-green ſpots upon the greater wing-coverts; tail very ſhort, and rounded. This ſpecies is about one third ſmaller than the common turtle-dove.

The

The top of the head is bluiſh-grey, becoming whiter upon the forehead; the throat is white; the neck breaſt, and ſternum, are of a vinaceous red, growing white on the lower belly and under tail-coverts. The back of the neck, the mantle, and wings, are vinaceous brown; the rump is grey, croſſed with two bars of black; on the intermediate tail-feathers are alſo two bars of black on a grey ground; the inner barbs of the wing-quills are cinnamon-colour. The bill is dark brown, the eyes reddiſh, the feet vinaceous red. The female is leſs than the male; the green ſpots on her wings are not ſo large nor ſo bright.

The emerald turtle occurs frequently about the Gamtoo Louri, and Van Staade, rivers; as well as near the Little and Great Fiſh rivers; and throughout the country of the Caffres. They neſtle in buſhes and among underwood, laying two white eggs. The cooing of the male is deſcribed by Vaillant as extremely tender and affecting; and the ſpecies is mild and familiar.—Tourterelle émeraudine, *Vaillant*, N° 271.

The Drumming Turtle. — This ſpecies is named from its cooing, which greatly reſembles the noiſe of a tabor, or ſmall drum, heard at a diſtance. It is like the preceding in ſhape and ſize, but its colours are different. The forehead is banded with white, which paſſes over and behind the eyes quite to the ears. The under parts, from the throat to the under tail-coverts, are pure white. The upper ſurface is of an olivaceous brown, nearly indeed ſimilar to the preceding, having the black bow on the rump, and the red on the inner bars of the wing-quills; but the ſpots on the wings are blue inſtead of green. The female is of a dirty-white underneath; in other reſpects they very nearly reſemble each other. The bill is dark brown, the eyes brown. This ſpecies, contrary to the preceding, is extremely wild and ſhy;

ſhy; it inhabits the ſame parts as the preceding, but prefers the great woods, and builds in trees; they lay two white eggs.—Tourterelle tambourette, *Vaillant*, N° 272.

The EGYPTIAN TURTLE. — Teſtaceous fleſh-colour; chin ſpotted, the feathers black, two-lobed, truncate and ferruginous at the tip. Bill black; head violet fleſh-colour; orbits naked, bluiſh; back cinereous; breaſt violet fleſh-colour; belly and thighs whitiſh; wings brown; two outermoſt tail-feathers cinereous at the baſe, black in the middle, the reſt white; two next on each ſide cinereous at the baſe, black in the middle, cinereous below, and whitiſh at the tips; the fifth on each ſide brown, obſolete-black in the middle; two middle ones wholly brown; legs fleſh-colour. Inhabits Ægypt. Frequents houſes. —Columba Ægyptiaca, *Turton's Linn.*

The ST. DOMINGO TURTLE.—Body grey; ſides of the head and collar beneath the nape white; ſpot on the crown, band under the eyes, and collar on the neck, black. Bill black; wings with a few blackiſh ſpots; breaſt vinaceous; front, chin, and vent white; tail grey, the outermoſt feathers white; legs red. Inhabits St. Domingo; eleven inches long.—Columba Dominicenſis, *Turton.*

The COLOMBAR.—This is a ſpecies of Vaillant's ſecond diviſion; and, being the only one he met with, he has given it the name of the diviſion itſelf; obſerving that, ſhould other ſpecies be diſcovered, this might with propriety be called the Colombar with blue epaulets; and ſo he has named it on his plate.

We have noticed ſome of the diſtinctive marks of this diviſion; to which we may add, that the head is generally larger, and the neck ſhorter and thicker, than in the pigeons or turtle-doves. They keep moſtly in ſingle pairs, and neſtle in the holes of trees; they do not fly ſo quick, but in their motions, and

and when perched, have the air and port of the jays and rollers.

The colombar is about the ſize of our ſtock-pigeon. The male has the head, neck, and breaſt, of a greeniſh grey, with more or leſs of an olive tint according to the play of light on the plumage; the ſcapulars, back, rump, and upper tail-coverts, are olive-green with a ſhade of yellow. The pinions are of a mild violet-colour, melting by degrees into olive-green; but the greater coverts are black with a broad edging of white. The lower part of the breaſt is jonquil-yellow, inclining to white on the belly; but the under tail-coverts are of a dark brown red. The tail is nearly even, and of a bluiſh-grey above. The legs are partly covered with white feathers; the naked parts and the feet are reddiſh; the bill is red at the baſe, the reſt yellow; the eyes orange-colour.

The female is ſomewhat leſs; and her head, neck, and all the under parts, and the mantle, are olive-green without any gloſs; and in ſome other parts of her plumage the colours are not ſo lively. The young male reſembles the adult female; the young female has none of the violet-blue on the pinion whence the ſpecies takes its name.

This ſpecies inhabits the country of the Great Namaquois, near the banks of the Fiſh River, (a different river from that on the eaſt coaſt bearing the ſame name.) They neſtle in the hole of a tree, on a heap of little ſticks with a layer of moſs, and over that ſome dried leaves; the female lays four eggs of a dirty yellow. They live entirely upon fruits. Vaillant took four young ones out of a neſt, which lived as long as he had fruits to give them; when theſe failed, he tried them with various kinds of ſeeds, and with minced meat; but they refuſed all, and periſhed with hunger.—Colombar à epaulettes violettes, *Vaillant*, N° 276, 7.

The GALLINACEOUS PIGEON.—This is the firſt ſpecies

ſpecies of Vaillant's third diviſion, which he calls *Colombi-galline*, which therefore bears the name of the diviſion. Thoſe included in this diviſion have in general the bills and plumage ſimilar to the pigeons; but their legs are long, and their wings ſhort and rounded, like the genera of the gallinaceous order; and they carry their tail low and pendent, like partridges. They live in ſmall flocks, conſiſting moſtly of one family, the father, mother, and young. They eat ſeeds, berries, and even inſects. They are generally upon the ground, where they run nimbly like partridges and common fowls. They ſpend the night reſting on the thick branches of trees. We uſe the word *reſting*, as it muſt be diſtinguiſhed from *perching*; for many ſpecies of partridges only reſt on branches which are broad enough for them to ſtand on, while it is well known that moſt birds *perch*, i. e. graſp a thin ſtick or branch with their toes. They neſtle either on the ground or upon rocks, and lay a certain number of eggs; and it is pretty certain that the young are covered with down when hatched, and that they run as ſoon as they come out of the ſhell. Laſtly, their flight is very heavy and awkward, extremely different from that of pigeons properly ſo called.

Thus much in general.—The preſent ſpecies bears a ſtriking reſemblance to the gallinaceous order in having ſome parts of the head bare, and red wattles under the chin, like our domeſtic cock and hen. The body is thick and ſtout, very different from the pigeons. In ſhort, its reſemblance to the pigeons is merely in the ſhape of the bill and the nature of the plumage. We need not repeat the general remarks, which apply to this ſpecies in particular more than to any other; and by which it will be ſeen that this ſpecies might well be ranked among the partridges. For a neſt they make a little hole in the ground, which they line with bits of ſtick and dried herbs;

the female lays ſix or eight rufous-white eggs, which the male and female ſit upon alternately: the young run as ſoon as they are out of the ſhell, and from that time never quit their father and mother, who call them inceſſantly if they ſtray, and protect them under their wings from cold or from the ſcorching heat of the ſun. Their firſt food is the eggs of ants, ſoft inſects, and worms, which the parents ſhow them, but which they are ſoon able to find for themſelves; as they get bigger, they feed upon all kinds of grain, ſeeds, berries, and inſects; but they do not ſeparate from the old ones till they pair, and begin to raiſe a family themſelves.

This ſpecies is about the ſize of our turtle-dove: but is of a ſtouter form, and looks much ſhorter, on account of the ſhortneſs and breadth of the tail. A patch of naked red ſkin goes round part of the forehead, the bill and throat, and extends backward to the ears; at the throat hangs a fleſhy flat barble, or wattle, of the ſame red colour. The head, cheeks, neck, and breaſt, are of a ſlate-colour, darker or lighter in certain poſitions; the ſcapulars and upper wing-coverts are ſilver-grey, and on the latter is a large patch of white. The belly and reſt of the under parts are pure white. The tail, which is very ſhort and rounded, is brown above and blackiſh beneath, the parts concealed by the coverts being white. The bill is red at the baſe, the reſt black; the eyes are encloſed in a double circle, the inner yellow, the outer red; the legs and feet are vinous red, the nails black. The female is leſs than the male; her colours are not gloſſy, and the white patch on the wing-coverts is wanting; neither is there any red wattle. This ſpecies inhabits the interior ſettlements at the foot of the rough hills of the Namaquois country; a dry and arid tract, deſerted by the pigeons in general, who, it is well known, frequent cool and watered places.—Colombi-galline, *Vaillant*, N° 278.

The

The QUAIL-PIGEON.—Leſs than the partridge-pigeon, vol. vi. p. 444. which it greatly reſembles (as the partridges reſemble the quails) in external characters and habits; with this difference, that the quail-pigeons unite in great flocks, the partridge-pigeons in ſmall ones, conſiſting of one family only.

This is an African ſpecies, inhabiting the mountains of the Great Namaquois; but Vaillant ſuppoſes it not to raiſe its young in that barren tract, not having met with any neſt. The male is about the ſize of the quails of Europe; it reſembles the pigeons only in the form of the bill and the nature of the plumage. The top of the head and all the upper ſurface are of a bright cinnamon-red, each feather however tipped with brown; the forehead and throat are white; the front and ſides of the neck are of a light vinaceous colour, with black ſcales bordered above with white; the middle of the ſternum, the belly, the thighs, and under tail-coverts, are faint red; the wing-feathers, which are red on the upper ſurface, are blackiſh within, which has a rich effect. The bill is yellowiſh-brown; the feet and eyes reddiſh. The female is rather leſs, and her colours not ſo bright. — Colombi-caille, *Vaillant's African Birds*, vol. vi. p. 116. N° 283.

In fabulous hiſtory we are told, that the pigeon was the favourite bird of Venus. Homer ſays it was the office of pigeons to provide for the nouriſhment of Jupiter; this fable takes its riſe from the ſame word, which means, in the Phœnician language, either a prieſt or a pigeon; for it is allowed that the curetes, or prieſts of Cybele, took care of the nouriſhment of Jupiter. The people of Aſcalon had ſuch a veneration for pigeons, that they durſt not kill and eat them, leſt they ſhould feed on their own gods: and they were particularly careful of all thoſe that were produced in their city. The Aſſyrians alſo conſecrated pigeons, becauſe they had a notion that the

ſoul of their once-famous Queen Semiramis had taken its flight to heaven in the ſhape of a dove. Silius Italicus relates, that two pigeons formerly reſted on Thebes: and that one took its paſſage to Dodona, where it gave the oaks the virtue of delivering oracles; the other, which was white, flew over the ſea to Libya, where it perched between the two horns on the head of a ram, and gave oracles to the people of Marmorica. Philoſtratus ſays, that the pigeon of Dodona alſo delivered oracles, that it was of gold, ſeated on an oak, and attended by a concourſe of people who came thither, ſome to conſult the oracle, others to ſacrifice. Sophocles alſo informs us, that Hercules received an oracle from the pigeons of the foreſt of Dodona, which foretold the period of his life.

The preſent exiſting laws for preſerving and protecting pigeons are as follow: Every perſon who ſhall ſhoot at, kill, or deſtroy, a pigeon, may be committed to the common jail for three months, by two or more juſtices of the peace, or he ſhall pay twenty ſhillings to the poor of the pariſh. 1 *Jac.* c. 27. By 2 Geo. III. c. 29, any perſon who ſhall wilfully ſhoot at, or deſtroy, any houſe-dove, or pigeon, belonging to other perſons, ſhall forfeit on conviction twenty ſhillings to the proſecutor; and, if not forthwith paid, the offender may be committed and kept to hard labour for any time not exceeding three months, nor leſs than one month, unleſs the forfeiture be ſooner paid; the owners of dove-cots, or other places built for the preſervation or breeding of pigeons, and thoſe appointed by them, excepted. An offender is liable only to one conviction for the ſame offence; and proſecutions are to be commenced, and carried on with effect, within two months after the offence; and, where perſons ſuffer impriſonment, they are not liable afterwards to pay the penalty. To ſteal wild pigeons in a pigeon-houſe, ſhut up ſo that the owner may

may take them, is felony. 1 *Hawk. P. C.* c. 33. A lord of a manor may build a pigeon-houſe, or dove-cot, upon his land, parcel of the manor; but a tenant of the manor cannot, without the lord's licence. 3 *Salk.* 248. Formerly none but the lord of the manor or the parſon might erect a pigeon-houſe; though it has been ſince held, that any freeholder may build a pigeon-houſe on his own ground. *Rep.* 104. *Cro. Eliz.*

ALAUDA, THE LARK.

The following appendix to the hiſtory of Larks is entirely from M. Vaillant's Hiſtoire des Oiſeaux d'Afrique. Larks are in general fond of the open country; wherever, therefore, man has carried the labours of culture, in thoſe cleared lands do the larks moſt delight. Such at leaſt is the inſtinct of larks properly ſo called. They are generally diſtinguiſhed by having the hinder nail long and almoſt ſtraight; but Vaillant enumerates ſeveral other kinds with ſimilar claws, as the jacanas, ſome of the cuckoos, and ſome ſpecies of parrots that are great walkers.

The larks walk and run very faſt; but they do not jump. They live upon worms, caterpillars, eggs of ants and caterpillars; in ſhort, upon all the ſoft inſects they meet with in the fields. Though they build among corn, they do not feed upon farinaceous grain; but oily ſeeds they are fond of. They have moſtly a pleaſant ſong; but ſuch among them as ſing the worſt have nothing diſagreeable in their cry. They build in the ground, and are good food, eſpecially thoſe that inhabit fertile places. The larks of the Cape are fat and ſucculent; but ſuch as are found in the deſerts are dry and hard.

The larks naturally divide into two diſtinct families: the larks properly ſo called, whoſe manners are hinted at above; and the pipit-lark, of a more long and ſlender make, a bill more delicate, and in manners

manners very different. Theſe larks frequent trees; they often perch, and moſtly build in hedges rather than on the ground.

Larks are very rare in the New World. Vaillant ſays he never found one among all the birds he had known to be brought from America, not even among thoſe which had been deſcribed as larks. He adds, that inexperienced naturaliſts are eaſily deceived upon this point. The following are the new ſpecies he diſcovered in Africa.

The THICK-BILLED LARK. — This is the ſpecies moſt commonly and moſt widely ſpread in Africa; it frequents the cultivated lands of the Cape, living there as the common ſkylark does with us; in the ſouthern parts of Africa; therefore, it may rank as the repreſentative of the common lark of Europe. Yet it differs in form, its bill being thicker, its tail ſhorter, and its legs longer; in colour, for its plumage is more brown; and in manners, for it never ſings, nor flies high :—there is little doubt, therefore, of its being a diſtinct ſpecies. It makes its neſt in the ground, and lays from four to ſix eggs, of a greeniſh grey dotted with red. The plumage is chiefly of a dark brown; the breaſt is ſpeckled with blackiſh upon a ground of dirty white, which is the colour of all the under part of the body; the eyes are brown; bill and feet blackiſh. The female is rather leſs; but in other reſpects ſimilar to the male.

The Dutch coloniſts at the Cape call this ſpecies *deubelde liwerke*, double lark, being much ſtouter than another ſpecies, the red-backed lark, which they call *inkelde liwerke*, ſingle lark, of which hereafter.—Alauda roſtro-craſſo, *Ency. Lond.* Alouette à gros bec, *Vaillant's African Birds*, N° 193.

The FLAPPING LARK.—Of all the larks round the Cape of Good Hope, and all the ſouth of Africa, this moſt reſembles, from its habit of riſing in the air, the common lark of Europe. Yet in the manner of

of its aſcent it differs from our lark, and is ſtill more diſtinguiſhed by its rich and variegated plumage. This ſpecies, however, does not riſe more than twenty or thirty feet from the ground; and, during the time of its perpendicular aſcent, it makes a peculiar flapping noiſe by the quick motion of its wings, which may be heard a long way off, whence the Dutch call it *clapert liwerke*, which may be rendered flapping lark; Vaillant calls it *alouette bateleuſe*, the puppet-player, or buffoon. When it has gained its utmoſt altitude, it diſcontinues that ſingular flapping of the wings, and utters a note *pi-ouit*, dwelling on the laſt ſyllable through the whole of its deſcent, which is effected by ſhutting the wings entirely, and deſcribing with them an oblique line till it reaches the ground; where it reſts at the moſt not more than half a minute, and then recommences the ſame aerial manœuvres, which it ſometimes continues to repeat for two hours ſucceſſively. At the dawn of day, at ſunſet, and during great part of the night, this bird is heard all through Swartland, and the barren plains of the Piquet-berg and Harow; in ſhort, through all the dry and ſandy coaſts of Africa, and even in the interior. But it muſt be obſerved, that the manœuvres of the flapping lark are only played off in the love-ſeaſon; in like manner as our lark ſoars in the air with a ſong only in the ſpring, or but ſeldom during the reſt of the year.

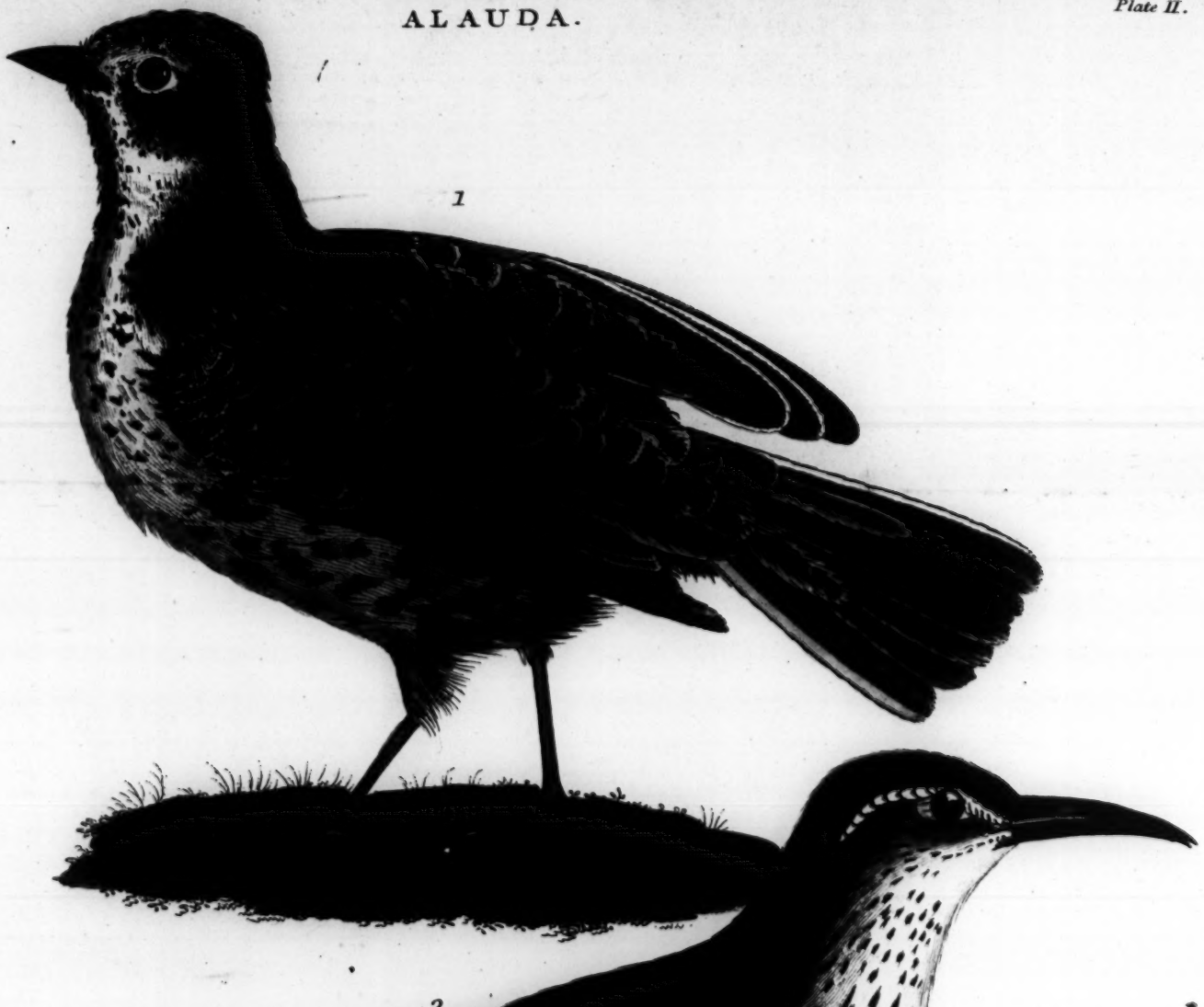
This bird never perches; it keeps always on the ground, where it picks up inſects and ſeeds, its proper nouriſhment; and in a hole in the ground it makes a neſt; the eggs are grey ſhaded with green, from four to ſix in number: the male and female ſit alternately. The plumage is agreeably diverſified, brown and black, interſperſed with white, yellow, and red, in ſcollops and feſtoons; the throat is white; the breaſt variegated with fawn-colour on a white ground, and the under parts of the body white

and

and orange; the bill is browniſh, the legs yellow, the eyes brown. The female is ſmaller; and her colours are not ſo regular, nor ſo ſtrongly marked. In the young bird, a reddiſh tint prevails all over the upper ſurface; and orange-colour beneath.—Alauda percutiens, *Ency. Lond.* Alouette bateleuſe, *Vaillant*, N° 194. and ſee the annexed Plate, fig. 1.

The SIRLI, or AFRICAN LARK. — The upper part of the body brown, rufous, and white, mixed in different ſhades; under parts white, with longitudinal brown ſpots. This ſpecies is called *ſirli* at the Cape, becauſe its note, or rather cry, expreſſes thoſe ſyllables. Its bill is longer than the larks have it in general, and rather ſickle-ſhaped. It inhabits Africa generally, eſpecially the Cape, as Cape Town, Table, Falſo, and Saldana, bays; and is found in Barbary. The female lays from three to five eggs, and the young are hatched in twenty days, during which the male and female ſit by turns. The bill is very dark brown, the eyes lighter brown, the legs and feet lighter ſtill.—Alauda Africana, *Ency. Lond.* Sirli, *Vaillant*; and ſee the annexed Plate, fig. 2.

The RED-BACKED LARK. — This is in Africa the repreſentative of the pipit-lark in Europe, (vol. vii. 21.) which it reſembles by its ſlender form and by its habits. It delights in woody places, perching on buſhes, and ſometimes on trees at the margins of foreſts; and has a very agreeable ſong. Its plumage is of a grey brown on the upper parts of the body, except the rump, which is red; the under parts are dirty black, except a few ſtreaks of brown on the breaſt; bill, feet, and nails, brown; eyes blackiſh. The female is leſs, and her colours fainter. This ſpecies builds at the foot of a buſh, and lays four or five reddiſh eggs. The ſpecific red on the back is not evident in the young bird, but the whole plumage then inclines to fawn-colour. This is the ſpecies called by the Dutch coloniſts *inkelde liwerke*, ſingle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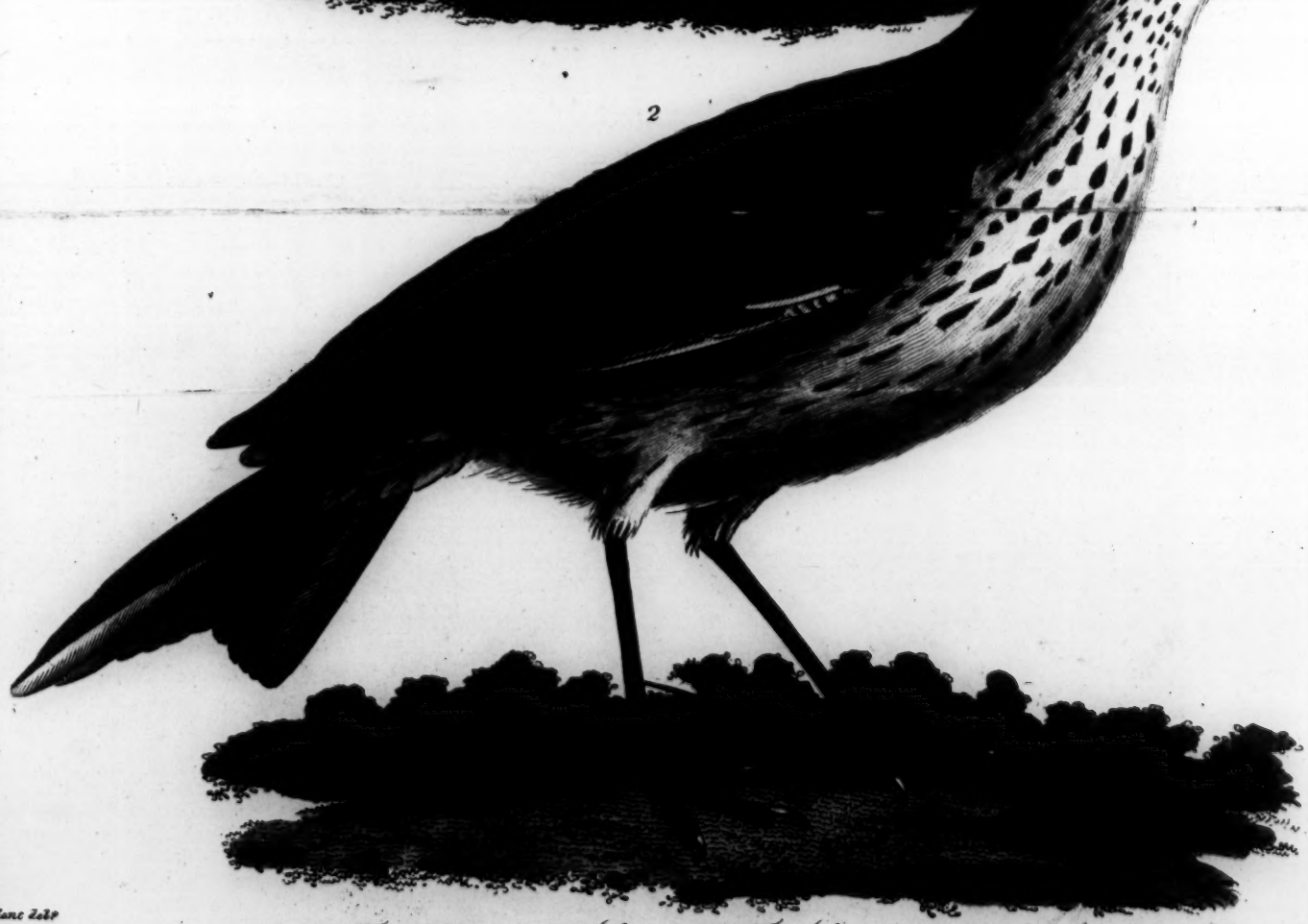

Vaillant del.t

J. Pass sculp.t

Fig.1. The Flapping Lark. 2. The Sirli, or African Lark.

London. Published as the Act directs March 12 1807 by J. Wilkes.

ſingle lark, as mentioned in the account of the thick-billed lark.—Alauda dorſo-rubro, *Ency. Lond.* Alouette à dos roux, *Vaillant*, N° 197.

The RED-CAPPED LARK.—This ſpecies inhabits the deſerts of Africa towards the country of the Houſwaanas; and is about the ſize of our common lark, which it reſembles in its flight and other motions, but does not riſe to any height in the air, unleſs, ſays Vaillant, "this may happen at ſome other ſeaſon of the year, as I remained but a ſhort time in the dry barren quarter which it inhabits, and never diſcovered the neſt or eggs." As this bird does not perch, its hinder claws being very ſtraight, it certainly neſtles in the earth like the reſt of the tribe.

The top of the head is covered with dark red feathers ſpotted with black; the hind part of the neck, back, mantle, wing-coverts, and rump, are ruſous brown, with a few blackiſh lines and bars; the throat, neck, breaſt, and flanks, are ſpeckled on a light-grey ground, inclining to yellow on the belly and under the tail. The wing-quills are reddiſh brown with a darker ſhade. The tail is ſomewhat forked, as indeed moſt of the larks have it; and a little mark with dirty white on the ſides. The bill, feet, a nails, are brown; eyes maroon-colour. The female is rather leſs; the cap not of ſo bright a red, the hind claw ſhorter.—Alauda pileo-rubro, *Ency. Lond.* Alouette à tête rouſſe, *Vaillant*, N° 198.

TURDUS, THE THRUSH AND BLACKBIRD.

The following are Vaillant's general remarks on thruſhes and blackbirds.

Thruſhes are migratory birds; and, in whatever place they are found, they are generally either on their paſſage farther, or come thither at certain ſeaſons, to take advantage of the fruits and berries, &c. or to ſpend the ſeaſon of love and hatch their eggs; for, as ſoon as their young are ſtrong enough to

travel, they are ſure to be gone. At the time of departure, they aſſemble in great flocks, always flying off in companies; but, as ſoon as they are arrived at the place of their deſtination, they ſeparate either entirely or in pairs, and never unite again till on the eve of continuing their journey. Though theſe birds are met with in great flocks, they cannot be ſaid to live in ſociety, but the contrary; and in this chiefly they differ from the ſtares, or ſtarlings, who keep together throughout the year, even during the time of incubation, their neſts being very cloſe to each other; the thruſhes, on the contrary, keep entirely ſeparate; and it is as rare to find two thruſhes' neſts within a certain diſtance (for on the ſame tree two are never found) as it is to find a ſtarling's neſt alone.

Notwithſtanding what Montbeillard has advanced, (copied by us in vol. vii. p. 37.) Vaillant affirms that the thruſhes are not dull melancholy birds: they are, on the contrary, ſo nimble and briſk, that few birds are more difficult for a fowler to approach; and, if the inequality and oblique tortuoſity of their flight be their only chance of eſcaping the gun, it has completely its effect; for no bird is more difficult to be ſhot flying than our common thruſh; it is leſs eaſy to hit, according to Vaillant, than the ſnipe.

What is advanced by the ſame author, that "they ſeldom play or fight together," (ſee our vol. vii. p. 37.) is contradicted alſo by Vaillant. No bird, he ſays, is more quarrelſome and pettiſh than the *turdus viſcivorus*, or miſſel thruſh. When ſeveral are collected in the ſame diſtrict, they are continually purſuing each other, ſcreaming and fighting till the weakeſt are driven away; and this animoſity is not confined to their own ſpecies, but extends to all who approach the place where they have fixed themſelves. The wood-pigeons, doves, ravens, cuckows, ſhrikes, and owls, are all driven off by the thruſh, who will even

even brave the claws of the keſtrel, ſparrow-hawk, and merlin; nay, even the buzzard and kite he has ſeen to flee from them. It muſt be remarked, however, that, when a formidable enemy appears, the thruſhes lay aſide their own animoſities, and unite in the attack; and their loud and piercing cries of anger aſſiſt in ſcaring away the intruders. "I was witneſs," ſays Vaillant, "in the plain of Genevilliers, near Paris, to a battle between about ten thruſhes and an oſprey, which is a kind of eagle. The latter, entirely beaten and conquered, had flown away for ſhelter and concealment into a thicket, where it remained motionleſs. Attracted by the reiterated cries and extraordinary motions of theſe thruſhes, I approached, and was greatly ſurpriſed to find that an eagle was the object of their attack. I had no fire-arms, the place being at that time called the *king's liberties*, where it was unlawful to carry any; unable, however, to reſiſt the inclination I felt of adding this bird to my collection, I ran home, (to Aſniers, a village near at hand,) and got a piſtol loaded with ball; (a gun might have diſcovered me.) At my return I found the eagle and the thruſhes ſtill fighting, the latter not giving way in the leaſt. I got within ten paces, and was fortunate enough to bring down the eagle at the firſt ſhot. I buried my piſtol, and concealed my bird among the buſhes; when I found I was not obſerved, I ſtole home with my prey, very proud of having killed an eagle ſo near Paris."

Blackbirds, ſays M. Vaillant, have by moſt writers been confounded with thruſhes, on account of their ſhape and exterior marks, which indeed have many traits of reſemblance. In manners, however, and habits, they differ conſiderably, the blackbirds being of a more ſedentary diſpoſition. If therefore it might be proper ſtill to retain the ſame generic name for both, on account of the difficulty of forming characters ſufficiently diſtinct to ſeparate them, ſtill

ſome kind of ſubdiviſion might be made. Buffon has generally called thoſe birds thruſhes *(grives)* which have ſpeckles or ſmall ſpots *(grievelures)* on their plumage; and thus ſome ſpecies which have no analogy whatever to the genus have been called thruſhes becauſe they had ſpeckled feathers, of which Vaillant gives ſome inſtances. Montbeillard has indeed obſerved that the blackbirds differed from the thruſhes in their habits: the latter, as we have already ſeen, are birds of paſſage, and migrate in large companies, which has never been ſaid of the blackbirds, who are more ſtationary, haunting conſtantly the ſame diſtrict, and may be generally found in the ſame ſpot at certain hours each day, unleſs they have been haraſſed and ſcared away. Not only do blackbirds remain in the country and diſtrict, but, if their brood has not been diſturbed, they will return and neſtle in the ſame thicket, in the ſame tree; nay, will even repair their old neſt, if not too much decayed, inſtead of building a new one. If ſome of the blackbirds remove, their journeys are not long; they deſcend from the hills into the plains, or go from one diſtrict into the next, where they expect to find a greater plenty of fruits and water; but, whether they travel or remain ſtationary, never more than one family is found together, conſiſting of the male, the female, and the young of the laſt brood.

Theſe are the obſervations of Vaillant, a very cloſe obſerver of birds in their natural wild ſtate. We ſhall now proceed to deſcribe the new ſpecies he diſcovered (chiefly) in Africa, and to give his more accurate accounts of ſome ſpecies already deſcribed in our ſeventh volume.

The Olive Thrush.—This ſpecies was the only thruſh found by Vaillant in Africa; he calls it *grivrou*. It is very common throughout the whole colony of the Cape of Good Hope, and is the African repreſentative of our European thruſh, at leaſt of that ſpecies

ſpecies vulgarly called in France the vine-thruſh. Their ſize and ſhape are preciſely the ſame; and they have a ſimilar note for their call, *zipp-zipp*, which both male and female utter at the moment they take wing. Vaillant ſays this call may be exactly imitated, ſo as to deceive the birds, by putting the end of the finger in the mouth, then drawing it away very quick, at the ſame time preſſing the lips very ſtrongly againſt it.

In the pairing ſeaſon, the male has a kind of hiſſing note, very ſimilar to that of our thruſh in the fine mornings and evenings of ſpring; like ours alſo it perches on the tops of the higheſt trees when uttering this ſong; and at that diſtance it is not unpleaſant, but heard near it is ſomewhat hard and monotonous, having little variety. Its ſong begins uſually an hour or two before ſunriſe; it is ſilent during the day; but re-commences at ſunſet, and continues till it is quite dark; but, when the moon ſhines, and the weather is ſerene, it continues for a great part of the night.

Theſe thruſhes are very plentiful in the environs of Cape Town, and eſpecially where vines are planted; they collect together at the time of the ripe grapes, which they are exceedingly fond of. The coloniſts then declare open war againſt them, more indeed on account of the deſtruction they occaſion than from a taſte for their fleſh, though it by no means yields in flavour to that of the European thruſh, ſo much admired in ancient Rome, and at preſent in the vine-countries: (ſee vol. vii. p. 35, 37.) But a deſire for their fleſh begins to prevail at the Cape; and, ſhould it increaſe, it certainly will be no injury to the vintage.

The grivrou is migratory at the Cape; ſome pairs however remain the whole year, eſpecially about Conſtance or Ronde Boſch, and in thoſe parts where the vines abound. Theſe birds paſs in ſuch numbers, in the beginning of March, through the foreſts of the Auteniquois, that all the trees in ſome parts will be entirely covered

covered with them. They continue paſſing for about a fortnight, after which not one is ſeen. This is preciſely the time when they quit the neighbourhood of the Cape. It is probable they return the ſame way in October, at which time they appear in plenty throughout the eaſtern parts of the colony. They complete their laying in November: the eggs are nearly round, with red brown ſpots on a ground of greeniſh white; the ſpots cloſer together at the thick end; they never lay more than five, commonly four, often but three. The neſt, which is pretty deep, conſiſts of ſmall branches interwoven; thin pieces of roots are very neatly laid acroſs each other within, but the neſt is not plaſtered as with our thruſh. Beſides grapes, figs, and all ſucculent fruits and berries, of which theſe birds are very fond, they feed alſo upon worms, caterpillars, and all ſoft inſects, which they ſeek for on the ground under hedges, thickets, trees, and eſpecially near rivulets in moiſt places, which they much delight in; ſo that, wherever a traveller meets with thruſhes, he may be certain that water is not far off; which explains the reaſon why theſe birds are ſo rare in the interior of Africa, though plentiful all along the eaſtern coaſt as far as Caffraria, which is well watered. On the weſtern ſide a thruſh is ſeldom to be met with; Vaillant never ſaw one.

The male is juſt the ſize of our common ſong-thruſh, *turdus muſicus*. The colour of the upper ſurface, that is, of the head, back of the neck, mantle, wings, and tail, is brown ſlightly ſhaded with olive, very ſimilar to the colour of the ſong-thruſh. The front of the neck, and breaſt, are of a fainter olive brown, with an orange tint. The throat is almoſt white, but has brown ſpecks along every feather. The reſt of the under plumage, from the breaſt to the under tail-coverts, which are white, is of a beautiful bright fawn-colour; the tips of the inner backs of the wing-

wing-quills, and all the under coverts, are of the ſame colour. The bill, inſide of the mouth, tongue, as alſo the legs and feet, are yellow; but the baſe and ridge of the upper mandible are browniſh. The eyes are very large, and brown; the tail a little forked; the wings reach below the rump, but not more than one third of the length of the tail.

The female is rather ſmaller than the male, and her colours not quite ſo ſtrong.

While young, both male and female are marked on the upper ſurface with a ſtrong tint of rufous brown, and the upper wing-coverts and large quills are bordered with red; the throat is white ſpotted with dark brown, as well as the breaſt and flanks; the upper mandible at that time is brown; the lower, and the feet, pale yellow.

Vaillant could not diſcover that the Hottentots had any name in their language for this bird; ſavage men do not invent names except for thoſe animals which are uſeful to them; and the Hottentots plant no vines. The Dutch and Hottentot coloniſts call it *druyve vreeter*, grape-eater; but this is a name which might be applied to many other ſpecies, and by which indeed they deſignate the thruſhes in general.

Vaillant ſuppoſes this to be the ſame with our *olive-thruſh*, vol. vii. p. 78. firſt deſcribed by Briſſon; and accordingly we have now included it with that ſpecies. The only difference appears to be, that he marks the bill and feet to be browniſh inſtead of yellow; but as Briſſon had ſeen only a ſingle ſpecimen, which was in Reaumur's cabinet, where the birds were very badly preſerved, it is probable that Vaillant's deſcription is more correct. Succeeding writers have deſcribed the bird after Briſſon, and have preſerved the name of *olive*, though that colour appears but very faint upon the plumage of this ſpecies. Neither of the above works contain a coloured figure of this birds, but Vaillant has beſtowed three plates upon it.—Turdus olivaceus,

vaceus, *Linn.* and *Gmel.* Merle olive du Cap, *Briſſ.* and *Buff.* Olive thruſh, *Lath.* Givrou, *Vaillant's African Birds*, N° 98, 99.

Vaillant deſcribes a bird which he ſuppoſes to be merely a variety of the above. He ſhot it on the borders of the river Sondag; it was a male; it appeared a very old bird, being arrived at that age wherein birds no longer moult and renew their feathers, and then the colours fade and change by the action of the air. The beautiful orange tint of the under part of the body was now merely a faint brown grey with a ſlight tinge of rufous; but in thoſe parts which were leſs expoſed to the air the primitive colours were more perfect. The upper part of the body, the tail, and wings, where the colours are ſtronger and more fixed, had yielded but little: the olive tint had diſappeared, and the brown appeared darker; the bill was of a lighter yellow, as if ſomewhat bleached; legs and feet the ſame; the ſpeckles of the throat were no longer viſible.—*Vaillant*, N° 100.

The action of the air on the plumage of birds is not confined to the living ſubject; it is ſtill more apparent in the dead one, as every one muſt have obſerved who keeps or ſuperintends a collection. Many loſe their colours almoſt entirely in a ſingle year, and theſe are chiefly ſuch as have naturally the brighteſt plumage. The bill and legs change totally, at leaſt the red and yellow; the red preſently becoming yellow, and the yellow perfectly white. That theſe changes are affected by the air and light, is evident from this obſervation, that a bird placed ſideways in a caſe, will after a time be found freſh and well preſerved on the ſide turned from the light, while the other ſide will be found quite faded. Vaillant therefore recommends to thoſe who would preſerve the colours of their birds as long as poſſible, to ſtop up their windows very carefully, eſpecially in ſummer; and, beſides glaſs doors to the caſes, to have dark ſhutters which may be

be opened occaſionally. But it muſt be obſerved, that, if the birds are not ſkilfully prepared, this precaution will haſten the deſtruction of the collection by inſects, who, being kept in darkneſs, will work by day as well as by night; and thoſe who uſe fumigations of ſulphur to deſtroy the worms, deſtroy the colours at the ſame time without remedy. There is a kind of oil ſecreted in the glands of the croupe, with which the birds renew the gloſs of their feathers: this moiſture, ſays Vaillant, ſqueezed from the rump of a living bird, will ſerve to renew the faded colours of a preſerved one, provided thoſe colours have not been deſtroyed by ſulphur. Spirit of wine is uſed for the ſame purpoſe; but its effect is only for a moment; as ſoon as dry it is of no farther ſervice, but rather the contrary, being of a corroding nature. Thus it appears that many precautions are neceſſary in preſerving a collection of birds.

The SPOTTED-SHOULDERED THRUSH.—Colour greyiſh-brown daſhed with blackiſh; throat lead-coloured; ſhoulders black, ſpeckled with white. Bill lead-colour; chin black, with a longitudinal white ſtripe each ſide; breaſt ſpotted with black; from the baſe of the bill over the eye, and reaching as far as the nape, a white ſtripe; leſſer wing-coverts edged with ferruginous; lateral tail-feathers black tipt with white. Inhabits New Holland; eight inches and a half long.—Turdus punctatus, *Turton*, from *New Holl. Zool.* tab. 9.

The PALE THRUSH.—Brown-aſh, beneath pale aſh; quill and tail-feathers tipt with white. Bill, irides, and legs, brown; body above cinereous ſpotted with brown and white; breaſt and belly pale grey. Inhabits Chili; reſembles the mocking-thruſh in ſize and manners; builds a cylindrical neſt a foot long, defended on the outſide with thorns, and ſtrewed within with wool and feathers, and having a ſmall

opening on the ſide; lays four white eggs, ſpotted with brown.—Turdus thenca, *Turton's Linn.*

The New-Zealand Thrush.—Blackiſh-brown; breaſt and belly white. Bill and legs black. Inhabits New Zealand: ſize of the ſong-thruſh.—Turdus Auſtralis, *Turton.*

The Ruffed Blackbird.—This is not an African ſpecies, but in outward conformation ſeems to reſemble thoſe we have juſt been deſcribing; yet its habits and mode of feeding muſt be different; for the tongue divides at its tip into a number of little filaments like a hair-pencil, ſomewhat like the humming-birds, which live by extracting the juices of flowers. The filaments in the tongue of this ſpecies, however, are as many as ſixteen in number, whereas in the humming-bird they do not exceed two, or three at the moſt. Whether this bird procures its nouriſhment in the ſame manner is what we cannot poſitively decide; but it ſeems not to have the faculty of darting its tongue into the calices of the flowers like them; for Vaillant, having ſoftened the tongue quite to its origin at the throat, could only make it protrude a ſmall matter beyond the extremity of the bill, as he has ſhown in his figure of the bird; ſo that it could not reach the bottom of a flower-cup.

This bird was brought to England from one of the South-Sea Iſlands; and was ſent (ſays Vaillant) from London by Mr. Woodford to Paris, to Citizen Gigot-Dorcy, with other curious birds, to have drawings made of them. The ruff, from whence the name is taken, originates under the throat, covering part of the front and ſides of the neck. Theſe feathers are of a ſingular ſhape: at their origin they are about a line and a half broad, and diminiſh in ſize till about the middle, where they are not thicker than a hair; then they ſpread out every way to a conſiderable width, curling up at the ſame time like a flower on a ſtalk. Theſe feathers are green at the roots, but entirely

entirely white at their curling extremities; ſo that the whole ruff or cravat is of a moſt brilliant whiteneſs. The middle wing-coverts are of a delicate white along the fold of the wing, forming a broad ſtripe diagonally through the middle when the wing is cloſed. The reſt of the plumage is gloſſy green intermixed with blue, brighter on the ſmall wing-coverts, on the wings themſelves, on the breaſt, tail, and head; duller on the under parts of the body from the breaſt to the under tail-coverts. The bill, feet, and nails, are black. The wings, when at reſt, reach but little beyond the beginning of the tail. The quills of the tail are twelve in number, the two laterals about an inch ſhorter than the reſt, which are nearly equal in length. This is a very rare ſpecies; Vaillant never had met with another ſpecimen; it is about the ſize of our blackbird.—Cravate-friſée, *Vaillant*, N° 92.

The WATTLED THRUSH.—This is a new ſpecies, firſt noticed by Vaillant, who has given four figures of it. It is very remarkable on account of a ragged black comb or creſt round the head and throat. Theſe birds aſſemble in large flocks, and are very noiſy; they follow the herds of wild oxen; they feed on berries, and on the inſects and worms which they pick out of the ground in moiſt places. They are very ſhy and miſtruſtful; and, when once ſcared by the diſcharge of a gun, do not eaſily collect again. Vaillant firſt obſerved them on the borders of the Gamtoos, and thence into Caffraria, but never on the weſtern ſide. Yet it appears that they ſometimes take long journeys, as Colonel Gordon killed ſeveral on the Koeberg, near Cape Town, where they were at that time very plentiful: it is probable that they had been driven thither by a violent north wind, as they had never before been ſeen ſo near the ſouthern extremity of Africa.

The male is ſomewhat bigger than the common ſtarling. The female is rather ſmaller, with ſimilar

but rather fainter colours; but the creſt is hardly viſible, whereas in the males it is ſo ſtriking, that you may diſtinguiſh them at a great diſtance when they are aſſembled on a tree, where they keep a continual chattering, intermixed with a ſhrill and piercing cry. The creſt doubles beneath the bill, covers the throat, then hangs down, dividing in two at the end like the corners of a dirty cloth thrown over the head; it riſes four lines high upon the forehead in an oval form; and a larger piece of it lies further back on the top of the head, bilobated like a heart. This creſt and the whole face of the bird are black, and devoid of feathers; the hind-head is bare of feathers alſo, but the ſkin is of a reddiſh caſt. The bill and legs are yellow; the eyes brown. The prevailing colour of the plumage is rufous grey, darker on the back of the neck and ſhoulders, lighter underneath. The wings and tail are black, with a caſt of bronze reflected amidſt black, green, and purple. The tail is ſquare; the wings, when at reſt, reach about half its length. There is a great reſemblance between this bird and the wattled ſtare, *(ſturnus carunculatus,)* and alſo the cock's-comb ſtare, (vol. vii. p. 32.) except in the colour of the wattles.

The female is ſomewhat ſmaller, as before obſerved. Her face is bare of feathers, but not of ſo deep a black. The creſt is very little ſeen except at the throat, and there it does not hang looſe as in the male; on the top of the head it is hardly diſcernible. The plumage of the wings and tail is not ſo gloſſy.

The young bird is ſo different from the adult, that it might be eaſily miſtaken for a different ſpecies, for it bears not the leaſt trace of the creſt we have deſcribed; on the contrary, the head is entirely covered wih feathers. The bill is of a yellowiſh brown; the feet and legs brown; ſo are the primary wing-quills, and all thoſe of the tail, without any reflexion or gloſs. The mid-quills, wing-coverts, mantle, ſcapulars, neck, head,

head, and breaſt, are brown grey; the thighs and under tail-coverts whitiſh.

It is probable they do not breed in the places where they were ſeen by Vaillant; they arrive in the hot ſeaſon, and depart previous to the rains.

There is a variety which is entirely white. Vaillant refutes an error which many naturaliſts have fallen into, of ſuppoſing whiteneſs of plumage to be a mark of age. In the examination of more than ſeventy white birds of various ſorts, he found them generally to be *young* birds, which had not yet taken their adult or ſpecific plumage; many of theſe he brought up in cages to aſcertain the fact with accuracy. Some birds may grow white with age, but it is by no means common, or a mark of age. It is proper alſo to remark, that, when a bird changes colour, it is by changing its feathers; for the feathers never abſolutely alter their colour. In birds ſo old as no longer to be ſubject to moult, the feathers wear away by rubbing, and the colours fade by the action of the air, and eſpecially of the ſun, which in bright colours, as red, orange, yellow, &c. produces a very ſenſible difference, even between the periods of moulting, and much more ſo when the plumage can no longer be renewed; ſo that birds are never ſo beautiful as when they have juſt moulted; the return of ſpring, and the ſeaſon of love, alſo ſeems to give them freſh luſtre.—Porte-lambeaux, *Vaillant*, N° 93, 94.

The PAGODA THRUSH.—This ſpecies, which is very common in many parts of India, probably inhabits ſome of the cantons of Africa, ſince Vaillant ſaw large flocks of them traverſing from weſt to eaſt in lat. 27. S. They were paſſing for ſix days, but never ſtopped, continuing a rapid flight ſo high as to be beyond muſquet-ſhot; one flock however came down to drink at a ſpring, by which means M. Vaillant ſhot two, which were both males. Theſe birds were probably going much farther eaſt to build and lay their eggs, as the ſpecies was not known to any of the people

ple Vaillant had with him. Several kinds of birds were conſtantly paſſing about this time, as bee-eaters, &c. no doubt for the ſame purpoſe. This ſpecies has been ſlightly noticed, vol. vii. p. 49.

The pagoda thruſh is of the ſame ſize and proportions as the ſtarling. The tail is a little tapering, but only ſo much as to appear round when expanded; and the wings reach about half its length. The feathers on the top of the head are long, narrow, and tapered, ſtretching backwards into detached points, and forming a very pretty tuft of a blue-black colour. The throat, cheeks, neck, and breaſt, are covered with delicate pointed feathers, not interwoven, but each feather lying ſeparate; of a reddiſh fawn-colour, with ſome lighter tints, and growing lighter and lighter on the breaſt and belly, and ſo on to the tail, of which the under coverts are entirely white, as is the plumage which covers the thighs. A rufous grey prevails over moſt of the upper ſurface; but ſome parts of the wings and tail are black. The legs are bright yellow; the eyes reddiſh brown. There is reaſon to ſuppoſe that the female has duller colours, and a ſmaller tuft. —Turdus pagodarum, *Gmel.* Martin-brame, *Sonnerat*, and *Vaillant*, N° 95, fig. 1.

The Iron-grey Thrush.—This, like the preceding, Vaillant procured by accident, not in the place of its uſual reſidence, but in its migration. It was on the 6th of October, while encamped at Bruyntjes Hoogte, on the margin of a little ſtream, called by the Dutch the Bird River, that a flock of theſe birds paſſed coming from the eaſt, and ſteering north-weſt. He ſhot ſeveral of them. Many flights of the ſame kind he obſerved while gaining the heights of Bruyntjes; but having paſſed thoſe mountains, he ſaw them no more, nor did he ever meet with them afterwards.

This bird is exactly the ſize of the foregoing. The top of the head is black, but there is no creſt. The cheeks are black; round the eye, or rather behind it, and

and going to a point backwards, there is a naked patch of an orange or bright fleſh-colour. The throat, neck, breaſt, and flanks, as alſo the upper ſurface of the body as far as the tail-coverts, are iron-grey, but darker on the hind-head; from the breaſt to the belly runs a ſtripe half an inch broad, juſt along the middle of the ſternum, of a delicate fawn-colour, or the colour of poliſhed beech-wood; under tail-coverts the ſame. The wing-quills are all black; the firſt ten are marked with white at their origin, but this is partly concealed by the coverts, on which appears a triangular ſpot of rufous: the mid-quills have a gloſſy reflexion, changing to green or purple on their outer barbs. The tail-quills are of a ſhining-black; the lateral ones tipped with fawn-colour. The tail is ſhort, and rounded at the tip; the wings reach about three parts its length. The bill is a bright orange-colour; feet and legs paler; eyes dark red. The female is ſomewhat ſmaller. The under part of the feathers of the ſcapulars and tail were worn or rubbed, by which it appears that theſe birds get into holes to lodge and lay their eggs, as this tribe, Vaillant ſays, univerſally do. Martin gris-de-fer, *Vaillant*, N° 95, fig. 2.

The MINUTE THRUSH.—Above ruſty-brown, beneath ruſty-aſh; chin whitiſh; wings and tail marked with black and ferruginous. Length three inches and a half. Bill and legs brown; primary quill-feathers blackiſh, the reſt black and tranſverſely ferruginous in the middle; four upper tail-feathers black, lower ferruginous.—Turdus minutus, *Turton*.

The GLOSSY THRUSH.—This ſpecies was firſt made known by Briſſon, who called it the long-tailed green blackbird of Senegal. Buffon has given a very bad coloured drawing of it, which neither exhibits its true colours nor the ſhape of its tail. Indeed the ſpecimens in the king's muſeum, from which he and Montbeillard made their deſcriptions, had been ſo repeatedly fumigated with ſulphur, that the original colours were

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in many inſtances entirely deſtroyed, and could only be gueſſed at; the ſpecimen now under conſideration was very badly preſerved alſo, for the account is by no means correct. Vaillant does not regard it as a blackbird, and objects to the deſignation of *Senegal*, becauſe he found it in the country of the Great Namaquois, very far diſtant from Senegal.

The male is about the ſize of a jackdaw, but much longer upon the whole, the tail itſelf being near fifteen inches in length, half as long again as the body: this is the length of the two middle tail-quills, for the next on each ſide is four inches ſhorter, and the reſt in ſucceſſion diminiſh each about two inches, ſo that the laſt is only five inches long; the quills are twelve in number, and the tail is tapered like that of our magpie. The wings are very long, and reach four inches beyond the rump when folded in, being eight inches long. This does not agree with Montbeillard's account; but is probably more correct. The head, cheeks, and throat, appear black in certain poſitions, but are really of a dull green, more or leſs gloſſy according as the rays of light fall directly or obliquely upon it; the throat however is ſomewhat brighter than the reſt, and is terminated by a rich tint of purple. The whole plumage of the upper ſurface, i. e. the neck, breaſt, mantle, and wings, are of a ſhining yellowiſh green, the gold tints and the dark green appearing according to the ſhades of light. On the wing-coverts is a large ſpot, which in a certain poſition appears of a fine velvet black, and as if raiſed into a lump or in relief, yet viewed in a different ſituation it diſappears entirely. The front of the ſternum, from the breaſt to the belly, is of a cupreous red, mingled with blue and purple; theſe two laſt colours are mingled and melted together on the flanks, thighs, and tail-coverts. But the tail principally ſhines with a mixture of all theſe bright and beautiful colours: the moſt elegant tints of purple, violet, blue, and green,

ſubſiſt

ſubſiſt together, and are ſo intermingled, and run one into the other, that each appears to predominate according to the poſition in which the bird is viewed: freſh beauties ariſe from an appearance of tranſverſe bars of a fainter colour; but this is only an appearance, for in certain poſitions they are no longer viſible; the lateral tail-quills have a leſs tinge of purple than the middle ones; and all the quills and the wings, as well as the beak and nails, are quite black. The female is ſmaller than the male; her tail ſhorter in proportion, and her colours not ſo bright.

Theſe birds are gregarious; they feed upon berries, worms, and inſects; they run along, and hop, cocking up their tail, like the magpies. Like the ſtarlings, they have a continual warble when on the ſpray. They are very ſhy, and difficult to approach. They are birds of paſſage, coming into the Namaquois countries at the time when a very nice berry or fruit, of which they are fond, is ripe. It is probable they migrate at that time from Senegal; if ſo, Briſſon's deſignation is not improper after all; but *perhaps*, ſays Vaillant, they come from ſeveral other parts of Africa, and ſpread themſelves throughout the whole torrid zone. To be certain of this, it would be neceſſary to know whether they make their neſts in Senegal, at what time they ſet out, and when they return. Vaillant was aſſured that they did not bring forth their young in places where he ſaw them; that they did not ſtay more than a month; and in ſome years did not appear at all. It is probable that the paſſage laſts a month, and that thoſe which are ſeen are generally newcomers. Vaillant ſaw but three flocks of them; at the firſt muſket-ſhot they all quitted the diſtrict; ſo that they probably only traverſe this part of Africa to gain the place where they are to lay their eggs and ſpend the rainy ſeaſon.—Turdus æneus, *Gmel.* Vert-doré, *Vaillant.* For the reſt of the ſynonymes, ſee vol. vii. p. 67.

The GILDED THRUSH.—Vaillant is of opinion that the green blackbird of Angola, ſo called by Briſſon, is only the female or young of that ſpecies called violet blackbird of the kingdom of Juida, (our gilded thruſh,) the difference of colour ariſing from ſex or age. He calls it *couigniop*, which is the name the ſavages give it, and places it among the ſtarlings.

The plumage of the head, upper part of the neck, throat, and all the under part of the body from the breaſt to the under tail-coverts, are of a beautiful poliſhed-ſteel blue, changing to faint green, purple, and violet, according as the rays of light fall. The lower part of the neck behind is of a more decided green; the mantle, ſcapulars, wings, and larger wing-coverts, are of a ſhining yellowiſh green; the feathers on the rump and tail are rounded like fiſh-ſcales, varying blue, purple, and violet. The tail-quills are nearly equal in length, and of the moſt beautiful purple that can be conceived, ſhining like ſpangles. The ſmalleſt wing-coverts, that is, cloſe to the pinion, are of a ſhining ſteel-colour, changing to violet; the larger wing-coverts have each a black velvet ſpot at the tip, which diſappears in certain poſitions. The eyes are orange-colour; bill and feet black. The young bird has by no means ſuch bright colours as the adult: their feathers are of a dull green, the wings darker. The female is ſmaller than the male, and her colours are not ſo bright.

Theſe birds go in large flocks; they are ſeen at the extremity of the Great Namaquois country, but there they do not ſtay long, nor did Vaillant ever ſee them among the Little Namaquois; they do not probably neſtle in the parts where he met with them.—Turdus auratus, *Gmel.* Couigniop, *Vaillant*, N° 90. See our vol. vii. p. 67.

The ROSE-COLOURED THRUSH.—This ſpecies Vaillant aſſerts to be very erroneouſly placed in this genus, ſince it more reſembles the ſtarlings, at leaſt in its

its habits and mode of living; which ſhows, ſays he, that none of our modern writers have ſeen the bird in a ſtate of liberty, but had merely copied the name from thoſe who had written before them. Yet Aldrovandus, the oldeſt naturaliſt who has ſpoken of this bird, ſays poſitively, that the bird-catchers about Bologna, in Italy, call it the ſea-ſtarling, and that it feeds on dunghills: this would be ſufficient to ſhow that it is not a thruſh nor a blackbird.

Vaillant, ſpeaking of the different countries in which this bird is found, (as already mentioned in vol. vii. p. 63,) obſerves, "Montbeillard (in Buffon) aſſerts that he has ſeen many which were caught in Burgundy in their paſſage to other countries. This would ſeem to imply that they appeared regularly at a certain period in Burgundy; but I have queſtioned all the perſons I have met with from that province, and not one has been able to give me information of their abode or appearance there. If they really came yearly into that country, they would be ſeen in ſome of the neighbouring places; for it is not likely that they fall from the ſky into that canton of Burgundy where Montbeillard ſaw them, and he does not tell us exactly whereabouts that was." Vaillant therefore is of opinion, that all which have been obſerved or caught alive in the north of Europe, muſt have been ſtragglers parted from the migratory flock, ſince no ornithologiſt has hitherto given us any inſight into their habits, manner of living, their neſtling, difference between the male and female, &c. This omiſſion is ſupplied by Vaillant, at leaſt with reſpect to thoſe found in Africa, in which country they regularly appear every year as high as 24° S. lat. remaining there ſome time, and then continuing their route due north, paſſing no doubt the Iſthmus of Suez to get into Barbary, where travellers ſay they are very common. Perhaps the ſame flock reach Bengal alſo, where it is

certain at leaſt that they are very plentiful, and differ very little from thoſe found in Africa.

The male is about the ſize of the blackbird, ſomewhat more than nine inches long from the tip of the bill to the extremity of the tail. There is a tuft of flexible feathers, falling back, on the head; this tuft is of a very dark violet, and the ſame colour prevails over the neck, and ends circularly on the breaſt. From the breaſt to the belly the plumage is roſe-colour, duller at the tip of each feather, and ſtronger at its origin, ſo that, looking from head to tail, the colours do not appear ſo bright as in a contrary direction. The ſcapulars, back, and rump, are of a fainter roſe-colour, the feathers being moſtly ſhaded with light brown at their points; and the middle of the back is ſpotted with black, the ſmaller wing-coverts near the pinions, the plumage of the thighs, flanks, and tail-coverts, are all black with a reflection of green, and faint roſe-colour at the tips; the under wing-coverts are black tipped with white. The large wing-quills are blackiſh; the mid-quills have a reflection of gloſſy green, which prevails over the large and mid-coverts. A white thread forms the contour of all the wing-quills, which has a very agreeable effect. The tail-feathers are all of a length, and of a gloſſy-green colour. The upper mandible is light brown, the lower yellow at its origin. The eye is brown; legs and feet reddiſh; the wings when at reſt reach about half the length of the tail.

The female is ſomewhat ſmaller; the tuft is ſhorter and leſs full; only the top of the head and front of the neck are deep violet; the cheeks, ſide and back of the neck, are cinereous brown. The roſe-colour on the other parts of the plumage is not ſo lively, nor the green ſo gloſſy.—In the young bird, light brown ſupplies the place of the roſe-colour.

Theſe birds go in large flocks; (the blackbirds are ſolitary;) they follow cattle, and fly juſt like the ſtarlings.

lings. Their food is worms, inſects, and berries; they pick the lice from the backs of cattle, and ſwallow them whole. Their ſong is a kind of whiſtling, frequently interrupted by a long ſcreaming note. Vaillant obſerves, that Buffon's coloured plate does not reſemble the bird it was taken from, which is ſtill in the muſeum of natural hiſtory, at Paris; the painter has very fooliſhly followed his own imagination, for the bird itſelf is exactly ſimilar to thoſe Vaillant brought from Africa.—Turdus roſeus, *Gmel.* Roſelin, *Vaillant*, N° 96. For the reſt of the ſynonymes, ſee vol. vii. p. 63.

The CAFFRARIAN THRUSH.—This bird has been already deſcribed, vol. vii. p. 77. Vaillant objects to the incorrectneſs of Briſſon's deſcription and Buffon's figure. He ſays the moſt ſtriking diſtinction of this ſpecies is the exceeding redneſs of the vent-feathers; he therefore calls it *curouge*.

The throat is black, as is the top of the head, the feathers of which form a kind of tuft which is only viſible when raiſed; neck, mantle, wings, and tail, light brown, each white round the end; the breaſt lighter than the wing, varied in a ſimilar but fainter manner; belly and legs dirty white; upper tail-coverts of a clearer white, under coverts vivid red; the brown colour of the tail becomes almoſt black at the extremity; it is tapering, and all its feathers are edged with white. The eyes are brown; bill and nails black, feet and legs browniſh. The female is ſomewhat ſmaller; the edgings of the feathers dirty white; the tuft not ſo large; the red on the vent not ſo ſtrong. Vaillant obſerved this in the country of the Great Namaquois only; even there it is rare, and only found during the greateſt heats.—Turdus Cafer, *Linn.* and *Gmel.* Curouge, *Vaillant*, N° 107, fig. 1.

The *Gold-vented Thruſh*.—This perhaps may be regarded as a variety of the preceding. As noticed, vol. vii. p. 77, it has no creſt. The head, cheeks, and

and throat, are black; the hind part of the neck, mantle, and ſcapulars, are brown grey; wings dull brown; tail blackiſh brown tipped with white. The under parts are white, dirty white about the vent and thighs; the under wing-coverts, or vent, deep yellow, the colour of gold, or of marigold, whence Vaillant has named it *cudor*. The bill is black; eyes, feet, and nails, brown. The above was a male, ſhot by Vaillant's ſervant on the ſhores of the Groot-vis, a river in Caffraria; the female eſcaped.—T. Cafer β, *Gmel.* Cudor, *Vaillant*, N° 107, fig. 2.

The Black-cap.—Something larger than a ſparrow. The male has an orange-coloured bill, and fleſh-coloured legs; the top of the head and part of the neck blackiſh-brown; the reſt of the upper plumage brown ſhaded with olive; all that is viſible of the wings and tail is of a darker brown; but the outer barbs of the primary quills are edged with a lighter tint of brown, and are black within. The under part of the body is bluiſh-grey, becoming whiter on the belly and under tail-coverts. Eye red-brown. This bird was found by Vaillant only in the foreſts of Bruntjes-hoogte, and ſeems to be a rare ſpecies. The female is rather ſmaller than the male; top of the head brown like the reſt of the body. Nothing was found in the ſtomach but the remains of inſects and wild berries. He ſaw neither neſt nor eggs, nor does he know the name it bears in the country. The male, which has a very agreeable voice, ſings morning and evening; not perched on the tops of trees, like our blackbirds, but in thickets near the water; a ſituation this ſpecies ſeems to prefer to all others, as Vaillant never met with it elſewhere.—Merle à calotte noire, *Vaillant*, N° 108.

The Black-breast.—This ſpecies has a black gorget which encircles the breaſt and neck; it ſeems to hang from the neck by two ligatures of a ſimilar colour; and has a ſtriking effect from the exceeding whiteneſs

whiteneſs of all the reſt of the under part of the body, from the throat to the under tail-coverts. The upper ſurface is of a dull black, except the tips of the tail-feathers, which are fringed with white. Bill, feet, and nails, black; eyes reddiſh brown, and very lively. This Vaillant ſays is an entirely-new ſpecies; but he cannot ſpeak of its habits and neſting, having met with only one, which was a male, and about the ſize of the vine-thruſh. Inhabits the Great Namaquois. — Hauſſe-col noir, *Vaillant*, N° 110.

The JOHN-FREDERIC. — This little blackbird, which by its ſhape, ſize, and long feet, bears much reſemblance to our nightingale, has named himſelf; for he repeats very diſtinctly *John Frederic*; ſo that the black and white ſettlers at the Cape know him by no other name.

Like our nightingales and blackbirds, the male of the this ſpecies warbles in the morning and at the ſetting of the ſun; he repeats in the moſt varied tones the ſyllables of his name, ſometimes omitting the firſt, and repeating frequently and rapidly the laſt or the two laſt: thus, *Jan-fredric-dric-dric-fredric.* His ſong is ever accompanied by a motion of the tail and wings expreſſing delight. Sometimes he darts upon the ground, and runs with wonderful celerity. His ſight is quick; he ſees an inſect at a conſiderable diſtance, and ſeldom miſſes his aim, either on the wing or on the ground. He is generally found among humble plants and buſhes, ſeldom mounting the tops of high trees. His chief nouriſhment is ſpiders, inſects, and worms, picked off the ground, and from the leaves of dwarf trees; he is alſo fond of fruits, and particularly grapes.

This bird is not ſhy, but may be eaſily approached. It appears to be curious and ſociable, and loves to approach men and their habitations. You need only turn up the earth a little at ſome ſmall diſtance from him, and he will come to the place (to ſeek for worms)

as

as ſoon as you quit it. Thus it is eaſily caught in a trap; but, when his confidence is abuſed, and ungratefully rewarded with captivity, he ſoon dies with vexation. The only way to keep him alive for a time, is to turn him looſe in a room; and he will be very amuſing to the company by his dexterity at catching flies on the wing.

The male alone ſings; the female's cry is *tic-tic*, ſimilar to that of our red-breaſt, which alſo it much reſembles in front, the throat and breaſt being of a bright red; but it differs in ſize; and it has a white ſtripe along the forehead and over the eye; the eye is ſurrounded by a large black patch; the rump and lateral tail-feathers are of the ſame red as the breaſt. The upper part of the body is brown-grey ſhaded with olive and ruſous; the wings are darker towards the ends; ſo are the two mid-feathers of the tail; the tail is tapered, and pointed at the tip. The belly is white; the reſt of the under plumage cinereous. The legs, feet, claws, and bill, are horn-colour, the eyes cheſnut. The male is ſomewhat larger than a nightingale; the female is not quite ſo large as the male; and the red on the breaſt and tail not ſo ſtrong. In the young bird, the head and back of the neck are tinged with red; the throat only is abſolutely red, the feathers of the breaſt being only as yet barred red and black; the beautiful orange-colour is not decidedly fixed upon that part till after the third moult.

This ſpecies builds a neſt two or three feet only from the ground, in the thickeſt buſhes, and among low plants: it is hemiſpherical, conſiſting outwardly of moſs and bits of roots. The laying is four or five eggs, light red with darker ſpots. The cuckows of Africa lay their eggs in the neſt of this bird. "I found in one of them," ſays Valllant, "an egg which I knew to belong to that ſpecies of cuckow which I call the *criard*; (ſee p. 223 of this volume.) At that time there was only one other egg, which belonged to the

the blackbird; a few days after I found the blackbird had laid two more; and I found that the male and female ſat alternately. Being obliged to quit that canton, I could not watch the incubation ſo as to know what became of the four eggs. It was on the 10th of November I diſcovered this neſt; on the 29th of October in the following year I found in the neſt of a John-Frederic a cuckow of that ſpecies which Buffon calls the green-and-gold cuckow of the Cape of Good Hope."

The John-Frederic is very common through all that ſouth part of Africa reaching from the Cape-town to Caffraria along the eaſt coaſt; but along the weſtern border it is not met with beyond the Camis mountains. Vaillant alſo found it in many of the interior parts, on his return by the Snow Mountains and Camdeboo. But they are moſt plentiful near the town, and in the town itſelf, where there is hardly a garden but has ſeveral neſts of them. The downs about the mouth of the *Zout-rivier*, or Salt River, as well as the environs of Falſe-bay, and the bay of Saldana, and Swartland, contain a very great number. In the ſeaſon of ripe grapes, theſe birds become very fat; they are then excellent food, as good as the red-throat of Lorraine; but they are not greatly ſought after at the Cape, though deſtroying them would be attended with the double advantage of furniſhing a nice diſh for the table, and of preſerving the grapes.—Janfredric, *Vaillant's African Birds*, N° 111.

The CAPE THRUSH.—This ſpecies, already deſcribed in vol. vii. p. 76, is very common at the Cape, eſpecially in Swartland, where it is called *geel-gat*, or yellow-arſe. Briſſon firſt deſcribed it. It is very noiſy; feeds on berries and inſects. Vaillant ſays that the belly and thighs are whitiſh, not yellow; and he did not obſerve that the under part of the tail was of a darker brown than the upper ſurface. They are delicate food, and much ſought after in the autumn

when the fruit upon which they feed is ripe. The eyes are hazle; bill, feet, and nails, browniſh black. The tail is cut off ſtraight or ſquare; the wings reach very little over its origin. The female is rather ſmaller; her colours fainter; ſhe builds in thickets, and lays five eggs. The ſpecies is found throughout the whole colony of the Cape, and very far in the interior on the eaſt coaſt.—Vaillant has a beautiful variety, almoſt entirely white, but preſerving the bright yellow under the tail, which has a very pretty effect: it was a yearling bird.—Turdus Capenſis, *Linn.* and *Gmel.* Merle brun du Cap, *Briſſ.* Brunet, *Buff.* and *Vaillant*, N° 105.

The *Hooded Thruſh.*—This is probably the ſame with the variety of the *brunet*, or Cape-thruſh, ſlightly noticed in vol. vii. p. 76. The figure given by Vaillant however differs in ſome reſpects, and without doubt is more correct. The black hood extends farther upon the throat: the eye-lid is orange-colour, which muſt naturally have eſcaped Montbeillard and Buffon, becauſe it entirely diſappears in the dried bird, conſequently it makes no part of their deſcription. According to Vaillant's account, however, it ſhould have been marked as a diſtinct ſpecies, ſince its haunts are totally different. It is not found about the Cape, nor in any part of the eaſt coaſt; but is very abundant in the country of the Namaquois, from the Rio Grande to near the tropic. The male is about the ſize of a lark, but ſomewhat longer; head and throat black; reſt of the plumage brown, darker on the wings and tail, lighter on the breaſt, and entirely white on the belly; the under tail-coverts lemon-colour. The eyes are dark brown, with orange eyelids half a line thick; bill and feet browniſh. The female is rather leſs, of lighter brown, head and throat not ſo black, and not ſo yellow under the tail.

This bird is very briſk and noiſy: all thoſe in the ſame diſtrict aſſemble at ſunſet in the ſame thicket, where

where they continue warbling one againſt the other, hopping about, and darting upon the flies and gnats that come near them; but they are not ſo adroit as the flycatchers, ſo that they often miſs their aim; indeed they ſeem to purſue theſe inſects rather through ſportiveneſs than a deſire to feed, but the flies are equally obliged to them no doubt. They aſſemble in preference near the banks of rivers; and continue their amuſement and exerciſe till dark night. They are ſo plentiful about the Rio Grande, and throughout the Namaquois, that a perſon might eaſily kill fifty in a morning. They build their neſt in thick buſhes, and lay five olive-coloured eggs. When the young firſt leave the neſt, the under part of the tail is already yellow, but the black is not aſſumed till the ſecond moult, nor have they as yet the orange eyelids; ſo that the young bird exactly reſembles the Cape-thruſh. When full grown it is ſomewhat larger than that; its food is inſects, fruits, and wild berries. —T. Capenſis, *β*, *Gmel.* Merle à cul jaune, *Buff.* Brunoir, or brown-and-black, *Vaillant's African Birds*, N° 106, fig. 1.

The IMPORTUNATE THRUSH.—Size and ſhape of the laſt; equally noiſy, but not ſo pleaſing, for it utters nothing but the ſyllable *pit*, which it repeats in a great variety of tones, but at length becomes very tedious. This bird has a great ſhare of curioſity; it perches on the tree neareſt to any perſon it ſees, and continues to follow him from tree to tree, repeating *pit-pit* without ceaſing. This curioſity M. Vaillant found very inconvenient to him, when he was watching ſome particular kind of bird he wanted to procure; for its motions and cry ſoon pointed him out to the reſt, and thus it proved a kind of troubleſome ſpy, which he found it neceſſary ſometimes to put to death when he had otherwiſe no ſuch intention; the noiſe they made on the neighbouring trees when he was ſometimes at

work in his tent, obliged him often to go out and diſperſe them with his gun.

The male and female continue together almoſt throughout the year, and generally perch on the tops of trees, ſo that they are not always in reach of a gun. The neſt is in the branches of large trees; the eggs four or five, ſpotted with olive. The plumage is almoſt entirely of a pale olive-green, lighter in the under parts, as generally it happens; the large quills of the wings, and the lateral ones of the tail, have a yellowiſh edging. The female is ſmaller than the male; but the colours in both ſexes are exactly the ſame. This bird is very common in Africa, along the eaſtern coaſt, from Duyven-ocks to the bay of Lagoa; but moſt common in the Auteniquois country; it is not found in the interior, nor on the weſtern coaſt.—Importun, *Vaillant's African Birds*, N° 106, fig. 2.

The Gabbling Blackbird.—This bird keeps a continued chant under hedges; they often collect to the number of five or ſix in places ſhaded with low buſhes thick and tufted quite to the ground; there they ſeem to be quarrelling, as each utters a different note, producing a noiſe rather diſcordant than pleaſing. They are very rarely ſeen on trees; but confine themſelves to the loweſt ſhrubs and the ground, where they ſeek for worms and inſects under the dead leaves, which they turn over with their bill and feet. They make a neſt of moſs and twigs, about two feet from the ground; the eggs are of a light brown colour, and four or five in number.

This ſpecies is about the ſize of the dial-bird; (ſee vol. iv. p. 182. and vol. viii. p. 209.) The upper ſurface, including wings and tail, is brown; throat white, the front of the neck, and the breaſt, are marked with a ſlight ſhade of brown; the ſides, belly, and thighs, are very light brown; the bill, feet, and nails, darker, and the eyes hazel. The tail is rounded, from the lateral quills diminiſhing by ſlow gradations outwards.

outwards.—The female is ſomewhat ſmaller, and not of ſo dark a brown.

Vaillant found theſe birds only in the Auteniquois foreſts; their chattering betrays them, and preſently points out the buſh which contains the covey, conſiſting uſually of one family. But it is not very eaſy to get at them; for being always on the ground, and among the thickeſt bruſhwood, you cannot ſee them even when you hear them very plainly; but, as there are generally ſeveral together, there is little riſk but, by firing under the buſh whence the noiſe proceeds, you may kill one or two.

The Senegal thruſh, (vol. vii. p. 75.) deſcribed by Briſſon, and Montbeillard (in Buffon), ſeems to bear a great reſemblance to this; but it cannot be correctly defined from the figure they have given. In their account, they ſay that the wings reach half the length of the tail, but in the figure they hardly ſtretch beyond the vent. That bird is alſo larger than the one we are ſpeaking of; its tail is of a different ſhape, and longer in proportion to the ſize of the bird.—Jaboteur, *Vaillant*, N° 112, fig. 1.

The ETHIOPIAN THRUSH.—This ſpecies, by Vaillant called *boubou* from the notes it utters, ſeems to be the bird deſcribed by Montbeillard (in Buffon) as the black and white blackbird of Abyſſinia, which in many reſpects reſembles the bird now to be examined, though certainly, (ſays Vaillant) it is not a thruſh. Montbeillard's deſcription of the tail it is not eaſy to comprehend: he ſays it is round and ſquare at the end: (ſee our vol. vii. p. 81.) If it be ſquare, the feathers are of equal length; if round, they muſt be tapering, like many of the ſhrikes, and as is really the caſe with the ſpecies now under conſideration. But, if this be the ſame which Montbeillard deſcribes, he muſt have ſeen the male only, and has greatly erred as to its manner of feeding; for it does not live on fruits and herbage, but on worms and inſects, and occaſionally

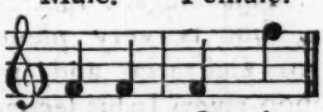
occaſionally upon young birds; a circumſtance well known to coloniſts at the Cape, who call it *ſwarte canari byter*, or *bonte canari byter*, (black or ſpotted bird-killer.) It is about the ſize of our ſmaller thruſh; the upper ſurface of the body, including the tail and wings, is entirely black. The throat is pure white; the neck and breaſt white a little ſhaded with fawn-colour, which grows ſtronger below the breaſt, on the belly, under wing-coverts, &c. The wings are very ſmall; they hardly go beyond the origin of the tail: all the wing-quills are black, but interſected by a ſtripe of ſnowy whiteneſs, running longitudinally upon each wing, which is formed by the tips of the middle and larger coverts, and by the edges of the two quills neareſt the body, which lie in a direction parallel with theſe coverts. The tail is black, and ſomewhat tapering. The eyes are dark brown; the beak is black; the feet and nails dark grey. The female is ſomewhat ſmaller than the male; the upper ſurface of the body is browniſh inſtead of black, but the under parts are of a more decided fawn-colour; the ſtripe along the wing is reddiſh, except at its origin, where it is quite white. The female, while young, has no white about her; and the wing-coverts are moſtly bordered with ferruginous red. The male, when young, may be eaſily miſtaken for a female, ſo great is the reſemblance.

This bird is very common throughout the ſouthern part of Africa, from the Cape to Caffraria; and in all parts of the eaſtern coaſt; but not among the Great Namaquois. It is eaſily known, though unſeen, by its call, which is ſo immediately anſwered by the female, that they ſeem to be the notes of the ſame bird; but the female is never heard till the male has uttered his call. Concealed in the thick tufts, the male calls, in an interrogative or an imperative tone, *bou-bou;* and the female, who is ſeldom far off, anſwers inſtantly in a ſubmiſſive feminine tone, *couï;* and this

continues

continues with ſuch exact alternation, that it appears really to proceed from the ſame bird. The notes are theſe:

Male. Female.



Bou-bou. Cou-i.

Theſe birds build their neſts in thickets the moſt concealed and moſt difficult of acceſs, and in the midſt of thorns. They lay four or five eggs; the young, when a few days old, are covered with a reddiſh down, but they come abſolutely naked out of the ſhell, as do moſt of thoſe birds which are to remain in the neſt for ſome time after they are hatched; while thoſe which are to quit the neſt as ſoon as they are born, are generally covered with a thick down to preſerve them from injury; ſuch are, moſt of the gallinaceous tribe, the ducks, pheaſants, quails, partridges, the oſtrich, the caſſowary, plover, buſtard, &c. which not only run as ſoon as they are out of the egg, but can feed themſelves and diſtinguiſh their proper food. —Turdus Æthiopicus, *Gmel.* Bou-bou, *Vaillant.*

The NABIROP.—This beautiful bird was firſt met with by Vaillant about the Gamtoo-river in Africa; he places it among the ſtares. During his travels into Caffraria, one night deſcending a ſteep mountain with his company, he was ſuddenly ſtopped by that river, and rather preferred encamping on its banks than attempting to croſs in the dark. Having ſlept in his waggon that night, he was waked at ſunriſe by the ſinging of birds he had never heard before, and which ſeemed to proceed from underneath his waggon; theſe were the birds we are now ſpeaking of. "Curious to ſee my new companions," ſays he, "I opened the ſhutter in front of my lodging, and was ſurpriſed to behold three or four thouſand of theſe beautiful birds, which had been attracted by the excrements of my cattle.

When

When I ſhowed myſelf, the birds all roſe together, even and cloſe, preſenting to my delighted ſight a vaſt green carpet moſt beautifully gloſſed by the rays of the riſing ſun." This elegant ſpecies is not found about the Cape, but is very plentiful from the Gamtoos quite to Caffraria; and, in the interior, about the Camdeboo-river. In his ſecond voyage, Vaillant ſaw them alſo near the Elephant-river, and thence to the Namaquois; ſo that they are ſpread over almoſt the whole of ſouthern Africa, except within a certain diſtance from the Cape, where they never had been ſeen by Vaillant or by any of the ſettlers whom he converſed with. They are birds of paſſage, for they quit that part of the country in the rainy ſeaſon; ſince Vaillant, on his firſt arrival at the Elephant-river, and in his whole courſe thence to Orange-river or Rio Grande, ſaw not one; but on his return he met with them continually, not on the banks of that river only, but of the Kauſſi, the Groene, the Swart-doorn, and the Elephant. It is neceſſary here to obſerve, that the reaſon why the rivers are particularly mentioned in pointing out the haunts of theſe birds, is that trees are rarely met with in Africa (except in the Auteniquois country and in Caffraria) but on the banks of rivers; and theſe ſituations are preferred by moſt birds: while thoſe few, on the contrary, which live on the ground, as the quails, buſtards, plovers, larks, &c. are never found in woods. Of all the places where the nabirop is found to reſort, it is in greateſt plenty about the Gamtoo-river, where Vaillant affirms he has ſhot ſixty or eighty in a day, and that at five or ſix diſcharges only; for they go in ſuch large flocks, and ſo very cloſe together, that a great many may be brought down at one fire by a ſkilful hand; the ſhot proper for this purpoſe is not of the ſmalleſt kind, but ſuch as is uſed for partridges; for otherwiſe, being ſtrong birds, they will not fall at once, but fly a long way after they are wounded. Theſe birds are not ſhy, but may be eaſily approached,

approached, especially when among the cattle, which they follow like the stares.—We have observed, vol. vii. p. 23, how difficult it is to distinguish these two genera of birds: all the African species, which Vaillant places among the stares, have indeed the habits and manners of that genus, but the Linnæan character has placed them among the blackbirds; and indeed Vaillant asserts, that no bird with the bill formed as we describe the starling is to be found in any part of Africa. His abuse of all systems and system-makers we do not think it necessary to translate; such as wish to be entertained in this way will find it in almost every page of his works.—A flock of these birds may be easily drawn together, if you place yourself under a tree, make a noise by blowing against a leaf laid across the lips, or whistling through a comb, or against the blade of a knife: this noise, which Vaillant calls *frouer*, they are so fond of, that they will come and perch upon the head of a musician so employed.

This species is called in the country *groene spreuw*, green starling. Besides the insects which they pick out of the dung of the cattle, and from moist places in the banks, they perch on the backs of oxen and wild beasts to eat the wood-lice which stick on their hides; they feed likewise upon all sorts of berries. They nestle in holes in trees or on the ground, like the sand-martins; laying five or six bluish-green eggs.—The plumage is thin and silky. The chief colours are green and blue, enriched with gold and purple; but the tints are so agreeably intermixed, and running one into the other, as to produce the most charming effect. Green shaded with steel-blue varying to purple prevails on the cheeks, top of the neck, and back of the head; the breast, neck, belly, back, and scapulars, are pure green; the wings of a bright glossy green like spangles; the great and middle wing-coverts are partly spotted at the tip with dark blue falling away to velvet black, as the bird is exposed more or less to the

light, but in particular ſituations theſe ſpots diſappear entirely: the ſmaller wing-coverts, which are partly hid by the ſcapulars, are gold-colour ſet off with blue and purple. The tail is dark varying green with ſome appearance of ſtripes; but the under part of the tail and wing feathers is entirely black; the under wing-coyerts are of a beautiful varying purple violet. The bill, feet, and nails are black; the eye orange-yellow.—The male bird. is about the ſize of a large thruſh, and ſomewhat bigger than the female, whoſe colours are not ſo bright; the golden feathers along the fold of her wings are leſs numerous, and not ſo ſhining. In the young bird, the colours are duller ſtill. Its note is a quick repetition of *pio-ïo*, *pio-ïo*; when on the ſpray, they warble like our ſtarlings. They are very good food, eſpecially when the berry called by the Hottentots *goirée* is ripe; this is very plentiful about the Gamtoo, and is probably what attracts theſe birds and many others; they are of the ſize of a large pea, and Vaillant preferred them to any he found in Africa; but they are of a purgative quality, and eating them to exceſs brings on a diſſentery.

This bird bears reſemblance in many points to the green blackbird of Angola, deſcribed by Buffon, but is clearly proved by Vaillant to be a diſtinct and hitherto-undeſcribed ſpecies. Vaillant killed 1923 of theſe birds while encamped by the Gamtoo-river; of theſe he ſtuffed and brought home ninety-four, which he very handſomely preſented to the different cabinets of France and Holland.—Nabirop, *Vaillant*, N° 89.

The Greater Rock-Thrush.—Body blackiſh, varied with brown and red; head cinereous, ſpotted with red; lateral tail-feathers rufous. Dr. Turton has diſtinguiſhed this from the T. ſaxatilis, (vol. vii. p. 65.) which he calls the leſſer rock-thruſh. The preſent ſpecies he deſcribes as follows: Feathers of the head and back cinereous at the tips, two middle tail-feathers edged with rufous, lateral

ones

ones rufous with a little blackiſh on the outer ſide near the tip. Inhabits ſouthern Europe, ſize of the miſſel thruſh.—Turdus infauſtus, the rock thruſh, *Turton's Linn.*

The AFRICAN ROCK-THRUSH.—This ſpecies in many reſpects reſembles our European rock-thruſh, vol. vii. p. 65. but Vaillant regards it as a diſtinct ſpecies. It haunts rocky places, and its manners are nearly ſimilar. Their colours are ſo much alike, that at firſt ſight they might eaſily be taken for the ſame ſpecies, varying only through the influence of a hotter climate, and ſome other local cauſes; but, on a cloſer examination, they will be found to differ ſpecifically. According to Montbeillard, the wings of the rock-thruſh reach almoſt to the end of the tail; according to Briſſon, about two thirds; but in the African ſpecies they do not extend half its length.

The male is about the ſize of the common blackbird; the tail is not quite ſo long, and looks thicker and more ſquat. The female is ſomewhat ſmaller; her colours are not only fainter, which is all that is obſerved by Montbeillard, but is very eaſily diſtinguiſhable from the male, becauſe the head and part of the neck are not of a bluiſh grey, like his, but entirely of a light brown. In both, the under part of the body, from breaſt to tail, including the rump, is of a fiery red, but brighter in the males; the brown colour of the mantle, wings, and two middle feathers of the tail, is alſo fainter in the female. The five lateral tail-feathers on each ſide are red; the exterior one only has a brown line running along the outer barbs: the feathers in general are lighter at the rims or borders; the tail is truncated; the wings reach not half its length. The bill and nails are black; the legs and feet browniſh; the eyes red-brown. The male, when young, has not the blue head, but reſembles the female; both are then of a faint rufous underneath, and browniſh above; but the red feathers are edged with brown,

and the brown ones with red; which has a pretty effect, and the bird looks as if covered with little ſcallop-ſhells or ſcales.

The brood ſeldom conſiſts of more than five, ſometimes leſs. Vaillant found this ſpecies, not in the ſouthern parts of Africa which he traverſed, but plentifully on the mountains about Cape Town; and in general upon all barren and rocky mountains. Though not ſcarce, this bird is very difficult to be procured, not only from its being ſhy and hard to approach within gun-ſhot, but becauſe, being generally perched over a precipice, it is often impoſſible for the fowler to get to the place where it falls even after he has ſhot it. The females go in the deepeſt holes and cleſts of the rocks to lay their eggs, ſo that their neſts are inacceſſible; for, if you come to the hole where they are concealed, you cannot even then get at them. Like the European blackbirds, they have a fine voice, and the faculty of catching the ſong of all the birds within their diſtrict. Vaillant thinks it a popular error that the birds in hot countries do not ſing ſo well as thoſe of Europe. There are ten times as many ſinging-birds in Africa as in Europe; and all thoſe ſpecies which ſing well with us have voices equally fine in hot countries. There are two African ſpecies belonging to a claſs which with us utter nothing but diſagreeable and raucous cries, gifted with notes very pleaſing to the ear, namely, the noiſy eagle, and the ſinging falcon: (ſee p. 34 and 77 of this volume.) And we ſhall find ſeveral other birds in that country, who do not yield in ſong to our boaſted nightingale.

There is a variety of this ſpecies, which Vaillant ſhot on the Table-mountains; the tail and part of the wings were white, which proves, that it is not in cold countries only that birds vary with white plumage. It was a young bird of the ſame year, not white through age. This ſpecies might perhaps be referred to the T. infauſtus, juſt deſcribed.—Rocar, *Vaillant's African Birds*, N° 101, 102.

The

The SMALLER ROCK-THRUSH. — Smaller and ſlimmer than the preceding; the legs are proportionably longer, the bill more ſlender, and the wings longer, which gives it a lighter appearance; and indeed it is much more nimble, and difficult of approach; it ſeems to deſpiſe the fowler, retiring as he advances, and reſting at a certain diſtance beyond his reach; as ſoon as it has perched on a rock, it turns quickly round to keep in view its purſuer, whom it ſeems to mock, by ſtamping with its feet, raiſing and ſpreading out its tail, fluttering its wings, and uttering a ſhrill cry. If the hunter, tired of following the bird, hides behind a rock to watch its flying off, it preſently makes a great circle, and places itſelf ſo as to keep its enemy in ſight, and be acquainted with all his motions. The fowler therefore muſt be patient and perſevering; he will generally find his prey in the ſame place the next day at the ſame hour. Never ſhoot till very ſure of your aim; for, when once the bird has ſeen the flaſh of a gun, it will be impoſſible ever to approach that bird again; the moment it beholds the fowler, (and theſe birds are very quick-ſighted,) it will fly into a hole in the rock, and not appear for a conſiderable time after, and always with the greateſt caution: if you only wound it, you generally loſe your labour, for it gets into ſome deep hole to die. This ſpecies, Vaillant ſays, gave him more trouble, and exerciſed his patience more, conſidering that it is numerous, than any of the various kinds he ſought after in Africa. The beſt way to make ſure of him, Vaillant ſays, is to hide your piece in a buſh, and then to appear without any thing in your hands, and without ſeeming to notice him. At firſt he will perch at a diſtance, and watch your motions; ſeeing you have neither arms nor ſtick, he will come nearer: when thus thrown off his guard, you may by degrees get to your gun, and then take aim when he leaſt expects it. When they have young ones, they are not ſo ſhy, or rather,

rather, like all other animals, their affection for their brood makes them bold, and throws them off their guard. If their retreat is diſcovered, both male and female will defend the entrance of the hole in the moſt deſperate manner. But it is very difficult to find the neſt; for the parent-birds will not enter the hole which contains it for a whole day if they ſee themſelves watched. The workmen who commonly cut wood thereabouts, as they never diſturb them, they are not afraid of; theſe can ſometimes point out a neſt; but, like that of the preceding ſpecies, it runs ſo far back into a narrow hole, that it is almoſt impoſſible to get at it.

The colours are the ſame as in the preceding ſpecies, but ſomewhat differently diſtributed: the blue-grey prevails not only upon the head, but all along the throat and neck as far as the breaſt, and behind it covers the mantle and ſcapulars. The wings are dark brown, all the quills and greater coverts edged with white. The breaſt is dark red, lighter towards the belly and under tail-coverts. The rump, the upper tail-coverts, and its lateral feathers, are red alſo; the middle ones dark brown. The eyes are cheſnut-colour, the upper mandible is hooked; bill, feet, and nails, entirely black. The wings reach ſomewhat below the middle of the tail; the tail is rounded at the tip.

The female is rather ſmaller than the male; the blue colour is not ſo ſtriking, nor does it extend ſo far towards the breaſt; the edgings of the wing-feathers are not ſo apparent, and the red on the breaſt and tail is of a fainter hue. The young bird has the head, neck, and mantle, of a brown grey with very faint ſtripes, the under parts reddiſh grey. The laying conſiſts of four or five eggs.

This ſpecies inhabits the Table-mountain, and all the rocky parts on the eaſt coaſt; but Vaillant never met with it in the weſt of Africa, though that coaſt abounds

abounds with thoſe mountains it ſeems to prefer. It reſembles the European rock-thruſh ſtill more than the preceding ſpecies. As we referred the former to the *infauſtus*, this is perhaps really the *ſaxatilis*, vol. vii. p. 65. thus preſerving the diſtinction of greater and leſs made by Dr. Turton.—Eſpionneur, *Vaillant*, N° 103.

The SOUTH-SEA BLACKBIRD.—This and the following are included in Vaillant's Nat. Hiſt. of African birds, and have never been noticed, he ſays, by any author.

This bird, which Vaillant did not ſee alive, he judges to belong to this genus from the bill and feet, and its ſtructure in general. It comes neareſt to the rock-thruſh, and there is little doubt but it haunts mountains and rocks, like the two African rock-birds juſt deſcribed. It is about the ſize of our common blackbird. The bill is dark brown above, yellowiſh underneath. The top of the head, back of the neck, mantle, ſcapulars, back, and tail, are of a delicate ſlate-colour; upon which ground the larger wing-coverts exhibit ſpots and edgings of bright red; the wing-quills are blackiſh brown, bordered with red. Except a large black patch which covers the ear, all the throat, and the ſides and front of the neck as far as the breaſt, are of a very deep ocre-colour; then comes a blackiſh collar, which encircles the breaſt from wing to wing, and ſeems to complete the contour of the upper extremities. The reſt of the under part of the body is alſo of the colour of red ocre, but grows weaker towards the thighs, where it becomes ſlightly ſhaded with brown, and the feathers on the lower belly are tipped with dark brown; the under tail-coverts are white, edged with dark grey. The tail is rounded at the end, the feathers tapering a little; the wings reach only an inch beyond the rump. The legs, feet, and nails, are reddiſh. It was brought from one of the South-Sea iſlands, and belonged to Mr.

Mr. Woodford, of London.—Perhaps the T. Auſtralis of *Turton*, noticed at p. 322 of this volume. Merle roux à collier noir de la Mer du Sud, *Vaillant*, N° 113.

The THREE-COLOURED BLACKBIRD.—This is alſo from the South Seas, and belongs to the ſame collection as the preceding. The tail is long, and very much tapered. The head, the neck as far as the breaſt, the mantle and ſcapulars, and the four middle quills of the tail, are black with a blue gloſs in certain lights. All the under part of the body, from the breaſt to the under tail-coverts, is dark red. The rump is a clean white; ſo are the lateral tail-feathers, but their inner barbs have black intermingled, and more ſo as the feathers increaſe in length. The bill is almoſt black; legs and feet yellowiſh red. The body is about the ſize of that of our ſmalleſt thruſh; but it is longer, the tail being of a greater length than the whole body from the tip of the bill to the anus.—Merle tricolor à longue queue, *Vaillant*, N° 114.

The WHITE-NECKED BLACKBIRD.—This bird is given by Vaillant from a mutilated ſpecimen, deprived of the horny ſheath or covering of the bill, ſo that even the genus cannot be abſolutely determined, a perfect bill being one of the chief guides in claſſing of birds, eſpecially in dried ſpecimens, the habits of the bird not being known, and the wings and tail being often badly ſet on ſo as to miſlead. It is left among the blackbirds, therefore, till obſervation of the perfect animal may more exactly determine its place.

This bird makes part of the rich collection of M. Temminck, to whom it was ſent from Batavia, but without any information relative to its habits or food. It is of the ſize of a full-grown lark. The head is entirely black; the throat and front of the neck perfectly white; below this is a black patch falling over the breaſt, and riſes narrowing up the ſides of the neck ſo as almoſt to join the black of the head; on the nape appears a yellow collar, which falls down on each

each ſide as far as the pinions, where it runs into the perfect yellow that tints all the under part of the body, from the edge of the breaſt-plate to the under tail-coverts, becoming a trifle weaker on the lower belly and ſides. The lower part of the back of the neck, the mantle, ſcapulars, wing-coverts, and upper tail-coverts, are olive-green enlivened with yellow; the wing and tail quills are dark brown, edged with greyiſh on their outer barbs. The feet are browniſh; the tail ſomewhat rounded at the extremity; and the wings, when at reſt, hardly exceed the rump.—Cravatte blanche, *Vaillant*, N° 115.

The SCALY BLACKBIRD.—This ſpecies reſembles the blackbirds in its general appearance, but the bill differs in having the upper mandible more bent than uſual in this genus. The whole plumage is beautifully feſtooned ſo as to reſemble ſcales, whence it has its name. The head and neck are entirely black; the breaſt the ſame, with a white ſpot ſhaped like a V upon each feather. The flanks, lower belly, and under tail-coverts, are of a dirty white ſhaded with yellow and tipped with a black feſtoon or ſcale. The mantle, ſcapulars, and wing-coverts, are black edged with yellow. The mid-quills of the tail are black; the lateral ones edged with yellow; wing-quills the ſame. Bill and feet blackiſh brown. The tail is ſomewhat tapering; and the wings reach about half its length. This bird is about the ſize of our ſmalleſt thruſh. Sent to M. Temminck from Batavia with the preceding.—Merle écaillé, *Vaillant*, N° 116.

The YELLOW-CRESTED BLACKBIRD.—Not only the creſt, but the back of the neck, the back, the under part of the body along the ſternum, and the under tail-coverts, are of a beautiful yellow; while the throat, the front of the neck as far as the breaſt, and the upper ſurface of the wings and tail, are of a ſhining black. This is a very remarkable diſtribution of co-

lours. The bill and feet are blackiſh. The eye is encircled by a naked ſkin, which in the dried ſpecimen deſcribed by Vaillant was painted red, but it remains to be aſcertained whether that be the natural colour or not. Size of the miſſel-thruſh; tail as long as the body meaſured from bill to vent; a little tapered; the wings reach very little beyond its origin. In the collection of M. Raye, of Breukelerwaard, at Amſterdam; ſaid to be brought from one of the South-Sea iſlands.—Merle jaune-huppe, à cravatte, ailes, et queue, noires, *Vaillant*, N° 117.

The FLUTE-PLAYER.—This bird differs much from the blackbirds in general. It reſembles them a little in the ſhape of the bill; but in other reſpects, either in manners or building its neſt, it has ſcarcely any reſemblance. Its low and mellow flute-notes have occaſioned its name. Like our reed-thruſh, (vol. vii. p. 51.) it frequents reedy places, by the water-ſide, and in marſhes. Its flight is low and ungraceful, for its thick heavy body is provided but with very weak wings, hardly reaching beyond the ſetting-on of the tail: indeed the bird uſes his wings but ſeldom; he climbs up the reeds, or remains ſuſpended to their ſtalks when at reſt. He uſes his feet very nimbly in marſhy places, jumping from one reed to another, in queſt of ſpiders, moths, butterflies, and all kinds of inſects and their larvæ. This bird is always fat, and fleſhy in proportion to its ſize; it is excellent food.

This ſpecies is diſtinctly marked by the ſhape of the tail, which is different from moſt birds: it is as long as the whole body, greatly tapered, and very acute; the barbs of the quills are extremely thin and ſcanty towards their extremity, ſo as to leave as it were the ſpace of a feather between each, which renders them tranſparent: the tail generally appears rubbed or worn at the end and the ſides, occaſioned by the ſharp leaves of the reeds; for the bird is continually crawling up and down, not like the pies, but claſping the reed with its claws, one foot after the other, and uſing its bill;

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in ſhort like the parrots, whoſe manner of climbing is well known.

The upper ſurface of the body and tail is red brown, with long narrow dark-brown ſpots on the head, and larger ones on the neck, ſcapulars, wing-coverts, rump, and thighs. All the under part of the body is a delicate fawn-colour, whiter on the neck and breaſt, and the throat is ſlightly ſpotted with black. The feet, bill, and inner barbs of the wings, are browniſh; the eyes hazel. The male is ſeven inches and one-tenth long, ſuppoſing a line drawn from the tip of the bill to the extremity of the tail. The female is ſomewhat ſmaller, her tail not ſo long, colours fainter, and no ſpots on the throat. The male and female are very conſtant; they are rarely apart. The female has not the flute-notes; but only a feeble cry to anſwer the agreeable call of the male. During the ſeaſon of love, which begins at the Cape in Auguſt, they build a neſt among the thickeſt ruſhes, for the purpoſe of concealment and ſecurity, in the manner deſcribed under the article *Reed-thruſh*, vol. vii. p. 51; the outer part is made of the leaves of the reed, which the bird has the art to tear off in narrow ſtrips, the more eaſily to interlace and twiſt them; the inſide has a delicate lining of the down of the ſame plant. They lay from five to ſeven eggs.

Theſe birds are very common in marſhes about the Cape, eſpecially behind Rond Boſch and about Conſtance; alſo along the eaſt coaſt, in all marſhy places, and on the banks of rivers, but never where reeds are wanting. On the eaſt coaſt they are not met with beyond the river Kruys, nor from thence to the Verloore Valley; indeed there is very little boggy land in that quarter, when once you have paſſed the Elephant-river. — Fluteur, *Vaillant's African Birds*, N° 112, fig. 2.

The CLAIMING BLACKBIRD.—This ſpecies was mentioned in Vaillant's Travels in Africa, previous

to his publiſhing ſeparately a Hiſtory of the Birds of Africa. One of his Hottentots had killed a female; the male, uttering his call, ſeemed to pronounce diſtinctly theſe words, *Piet, myn vrow*, meaning in Dutch, which the Hottentot underſtood very well, "Peter, my wife." The man's name was Peter; and, thinking that the poor bird demanded his wife, he determined to ſhoot no more birds, leſt ſome accident ſhould befal him; but, when it was pointed out to him that all the males repeated the ſame notes, he found that it was their natural ſong or cry, and agreed to go on killing as uſual. From this circumſtance Vaillant gave it the name of *reclameur*, "one who claims or demands any thing." Beſides the cry here mentioned, which is the real call, the male has a ſtrong melodious chaunt, chiefly in the morning and evening, and often in the night. But he is only heard in the ſeaſon of love: he perches on the largeſt trees, and always on the higheſt branches, eſpecially if the female is ſitting in ſome thicket within hearing. The male may be eaſily approached while he is ſinging, at other times not: the beſt way is to watch him at the brink of a rivulet; for, like our blackbirds and thruſhes, it loves watery places; not that theſe birds drink more than others, but becauſe they feed upon worms and inſects, which are more plentiful in moiſt places.

The male is ſomewhat ſmaller than the reed-thruſh, but has the ſame proportions, and, except in the pairing-ſeaſon, has only a kind of hiſſing note like that. The upper ſurface of the body and wings are brown gloſſed with bluiſh grey, through which appears a ſlight olive tint. The wing-quills are a faint black, edged with bluiſh grey; the four middle feathers of the tail are blackiſh; the lateral ones yellow. All the under parts of the body, from the throat, including the tail and under wing-coverts, are of a beautiful orange-yellow, a little lighter on the belly. The eyes are dark brown; the bill and legs ſlate-colour. The

tail

tail is ſquare; the wings, when folded in, reach very little beyond its baſe, or origin. The female is ſomewhat ſmaller, and in colour fainter. The young one has the wing coverts, ſcapulars, and back, edged with rufous. This ſpecies inhabits the Auteniquois foreſts, Caffraria, and the woods about Bruyntjes Hoogte.—Reclameur, *Vaillant*, N° 104.

The FOOLISH THRUSH.—This is marked by Vaillant as a ſpecies of daw; at leaſt as one of thoſe African birds which come neareſt in reſemblance to that diviſion; for Vaillant found no real daws in Africa. Montbeillard (or rather Buffon) calls it *jaunoir*, as having yellow and black in its plumage; but Vaillant aſſerts the firſt eleven quills of each wing to be of a very dark red, and he calls it *roupenne*, or red-wing. The reſt of the plumage is black, changing to green on the tail and wings, and ſhining black on the back. The red feathers of the wing are dark brown at the ends; and the wings reach about half the length of the tail. The male is the ſize of a large thruſh; the female ſomewhat ſmaller, of a leſs ſhining black, and the wing-feathers of a fainter red. The head, neck, and top of the breaſt, are greyiſh, with black ſtrokes along each feather, like the female of the common daw.

This ſpecies is very common at the Cape, eſpecially throughout the colony, or cultivated part; they go in flocks of four or five thouſand, and are very deſtructive in the gardens and vineyards, ſo that it is neceſſary for ſettlers to be continually on the watch if they expect to have any produce. The territory of Conſtance, on account of its proximity to the rocky mountains, is greatly infeſted by theſe birds, who neſtle in the cleſts of the rocks, in rows ſide by ſide; the neſts are frequently deſtroyed, and the eggs taken in great numbers; they are very good food. Each neſt contains four, five, or ſix, eggs; and they have two broods in a year, which accounts for their great increaſe. The birds themſelves are delicate eating, eſpecially in the

time

time of ripe fruit; in the deſerts they live upon ſuch berries as they can find; thoſe which feed on grapes are the beſt. Beſides fruit, theſe birds ſeek food in the earth, and eat inſects and worms; and they follow cattle, like the ſtarling. At the Cape, they call this bird *berg-ſprew*, mountain-ſtarling; or *rooge-vlerk ſprew*, red-winged ſtarling. They are not ſeen farther weſt than the Kamis Mountains; but are very plentiful all along the eaſt coaſt and in the interior; they are ſo numerous about the Gamtoo river, that Vaillant ſays he killed thirty-two at one ſhot. There are twelve feathers in the tail; five on each ſide go off tapering, forming a blunt ſpear-top, becauſe the two mid-quills are very little longer than the next two. When on the wing or perched, they emit the cry of *pillio-pillio*, or *kouëk-kouëk*, in a manner like our ſtarling.—Turdus morio, *Linn.* and *Gmel.* Roupenne, *Vaillant*, N° 83, 84. See our vol. vii. p. 66.

The NABOUROUP.—This ſpecies is found in the Namaquois country in Africa, where the natives call it by this name. It greatly reſembles the preceding, ſo we have little to do but to point out how it may be diſtinguiſhed. It is about two inches ſhorter, being about the ſize of our common blackbird. The tail is very different: the quills are almoſt all of equal length, the lateral ones being not more than eight lines ſhorter than the middle or longeſt; whereas in the preceding ſpecies the feathers diminiſh very conſiderably from the two mid-quills quite to the outſides. The eyes of the *roupenne* are brown; of the *nabouroup* of a beautiful yellow. Both birds are black; but the feathers in the preſent ſpecies are longer, more ſilky and ſhining, inclining to violet, with a purple tint on the wings: the dark feathers of the redwing rather more incline to green. The red feathers in the wing are more perfectly red within and without in the redwing; for, if the feathers of the nabouroup be turned up, their inner barbs are white. The female differs from the male only in being ſomewhat ſmaller.

This

This bird is found among the Little and Great Namaquois, from Nameroo, in 30° S. lat. quite to the tropic. They are gregarious, and their habits are the ſame as the preceding; they are fond of the berries of a ſpecies of ebony very common throughout the country of the Namaquois. Its ſong is agreeable; its fleſh good food. The bill and nails are black; feet and legs browniſh; eyes yellow. They neſtle in the rocks. The Dutch coloniſts call this bird *witte vlerk ſprew*, white-winged ſtarling; becauſe the inſide of the wing-quills is white.—Nabouroup, *Vaillant*, N° 91.

The DOUBLE-COLOURED THRUSH.—This ſpecies is called *ſpréo* by Vaillant, and is deſcribed as follows. It is of the ſize of a blackbird; the colour in general is brown, changing to a gloſſy green chiefly on the neck and tail; the lower belly and under wing-coverts white; the bill and feet browniſh; the eyes hazel; the baſe of the lower mandible is yellowiſh, as is the mouth; there are croſs bars of deep brown on the tail which are viſible only when the rays of light fall in a particular manner. Theſe birds are well known at the Cape, and throughout the whole colony; they are always found on the ground among cattle, like the ſtares, and hence are placed in that genus by Vaillant, though the ſhape of the bill, from which Linnæus has formed the generic character, has brought them among the blackbird tribe. They fly in flocks ſometimes of three or four thouſand; they make their neſts upon houſes, in holes in the walls, or under the tiles between the beams, and often in barns. In the uninhabited parts, they make their neſts in holes in the earth like the ſand-martins, or in hollow trees like the woodpeckers; and it is very common for them to drive the owners out of the neſt, and take poſſeſſion of it, as before remarked of the ſtarling; (ſee vol. vii. p. 24.) nay, they will even ſeize upon the neſt of the ſwallow. Their eggs are five or ſix in number, greeniſh with brown ſpots. The male is ſomewhat larger

larger than the female. The young bird has more of the gloſſy green than the adult; which is worthy of remark, becauſe in general birds which have ſhining colours do not attain their full brightneſs till they have moulted. The ſettlers at the Cape call this bird *wit-gat-ſprew*, the white-tailed ſtarling. In the time of ripe grapes, they do much injury to the vines; at that time alſo they are delicate eating, ſo that open war is declared againſt them in autumn. Their ſong is much like that of our common ſtarling.—Turdus bicolor, (vol. vii. p. 72.) *Gmel.* Spréo, *Vaillant.*

The Ceylon Thrush.—This is placed by Vaillant among the butcher-birds, and, by the account we have to give from his work, it will appear he was well juſtified in his arrangement. Edwards has alſo placed it in the ſame genus; but Briſſon calls it a blackbird, or thruſh, and ſo we have given it, vol. vii. p. 70. Buffon, (or rather Montbeillard,) finding theſe writers to differ as to the genus of the bird, called it at firſt ſimply *plaſtron-noir*, black-breaſt; but, when the plates were engraved, he had decided to place it in this genus, accordingly it is called *Merle à collier*, collared blackbird.

Vaillant objects alſo to the name of *Ceylon* thruſh; ſince, if it really inhabits Ceylon, it is not there excluſively, being very common at the Cape, and in the ſouthern parts of Africa, and is found all through the interior of the Dutch ſettlement. It is called *bacbakiri* at the Cape from its notes; alſo *couit-couit*, from the notes of the female. It has likewiſe the name of *geele canari-byter*, yellow canary-biter, for at the Cape the word *canary* is applied to almoſt all the ſmall granivorous birds, and *biter* to all their deſtroyers. It has beſides the name of *eyland-vogel*, iſland bird, for what reaſon it is not eaſy to ſay, unleſs it be becauſe they are often ſeen on the ſea-ſhores, where the tides form little knolls encircled with water. The ſpecies is very numerous; it is found all along

along the eaſt coaſt as far as the Caffres; alſo on the weſt coaſt, particularly in Swartland, and even in the gardens at Cape-town. It is very noiſy. The male pronounces pretty diſtinctly the ſyllables *bac-ba-ki-ri;* which the female preſently anſwers by theſe, *cou-it, cou-it.* Vaillant gives the notes as follows:

Male Female.

Bac-ba-ki-ri, Bac-ba-ki-ri. Cou-it, Cou-it.

The two firſt notes of the male are very diſtinct and grave; the two laſt very ſharp, and connected together: ſometimes the firſt of theſe two laſt notes riſes to *f*, ſometimes only to *c*, but the concluding note is always the loweſt of the two, and never differs more than half a note, which we think neceſſary to mention, becauſe it ſeems to vary from every regular ſcale of muſic. By practiſing theſe notes in a kind of whiſtle, it is very eaſy, Vaillant ſays, to draw the birds towards you: when he had killed the male, he was ſure to bring the female near by counterfeiting his notes for a few minutes; and vice verſa. Indeed theſe birds are by no means ſhy; you may eaſily get within gun-ſhot of them. They live moſtly on worms, caterpillars, ſpiders, and all ſorts of inſects. Their wings being ſmall, they cannot purſue birds in general, but ſometimes they ſeize on young ones that cannot fly well. Yet they are naturally cruel, like moſt of the genus; when confined in a large cage, they kill every thing they can get at. An inſtance of this is related by Vaillant. While he was at the Cape, his negroes, one day in his abſence, caught a bacbakiri, and put it into a large cage in which was a quantity of other birds. At his return, the men thought to pleaſe him greatly by telling him what a curious bird they had caught. By their deſcription, he preſently found it muſt be a but-

cher bird, and he ſuppoſed it would not belie its name. All but himſelf were ſeized with the utmoſt aſtoniſhment and terror when they approached the cage. The butcher had loſt no time in the exerciſe of his calling: thirteen birds were already dead, ſeveral others wounded; the reſt had got into holes and corners as well as they could, and lay one over another in the utmoſt panic at this formidable intruder. He was now preſently put to death; and the negroes received a ſtrict charge never to introduce ſtrange company into a ſociety which it took ſo much pains to collect.

This is a beautiful ſpecies. Grey, ſlightly ſhaded with olive, occupies the top of the head, the upper part of the back, and ſides of the neck; the eye-brow, which reaches to the noſtril, is yellow; two ſtrings of black, ariſing from the corners of the mouth, hang down on each ſide the neck, and ſupport a breaſt-plate or medal of the ſame colour. The ſpace between theſe ſtrings, that is, the throat and front of the neck, are of a beautiful jonquil-yellow, which colour prevails on all the under-feathers of the body, as far as the under tail-coverts. The mantle, ſcapulars, wing-coverts, and croupe, are olive-green with a rich ſhade of yellow. The tips of the primary wing-quills are dark brown, the outer barbs olive-colour, the inner parts blackiſh. The tail is tapered nearly like that of the cinereous ſhrike, that is, when ſpread out, it is circular, and not ſpear-ſhaped like the fiſcal or the European pies. The two middle quills are of the ſame green as the reſt of the ſurface of the body; the reſt are partly black, but yellow at the tips; but the yellow ſpreads farther in proportion where the feathers become ſhorter; ſo that the laſt feather on each ſide is almoſt entirely yellow. The bill and nails are black; the feet brown; the eyes reddiſh brown.

The male is nearly the length of our blackbird, but the body is not ſo bulky. The female is not quite ſo large;

large; but in other reſpects reſembles the male, except that her colours are not quite ſo ſtrong. Montbeillard gives an erroneous account of the female, which will agree only with a young bird; for, when young, neither male nor female has the black ſpot on the breaſt, and the ſtripes or cords which ſuſtain it; and the olive-grey on the head, and the beautiful yellow of the body and eyebrows, are wanting; for all the top of the head, hind part of the neck, mantle, wing-coverts, in ſhort, all the upper ſurface of the plumage, is an olive-green; the throat is whitiſh; the under parts, neck, breaſt, belly, &c. are of a light yellow with a ſhade of olive; the yellow on the tail is duller. Vaillant's 67th plate of African Birds repreſents the male and the young one, though by a miſtake of the engraver the young one is called the female.

The male and female keep almoſt conſtantly together; they make their neſt in thickets; they ſit on the eggs, which are four or five in number, by turns. They take particular care of their young, which do not leave them till they are quite able to provide for themſelves. They do not acquire their full and beautiful plumage till the following ſpring, after two moultings. The Namaquois call this ſpecies *hoëp;* the Hottentots of the Cape, *orep.*—Bacbakiri, *Vaillant*, N° 67.

PERRIN'S THRUSH.—This was communicated by M. Perrin of Bourdeaux, who brought it, with many more, from the coaſt of Africa. It ſo much reſembles the preceding, that ſcarcely any difference can be diſcerned, except the very evident one, that the preſent has the throat and ſtomach red, which in the preceding are yellow. Each has the ſame form and dimenſions, the ſame kind of black collar, ſuſpended as it were by a fillet paſſing over the eyes and to the corners of the mouth. It inhabits the environs of Malimba in Africa.—Pie-grieche Perrin, *Vaillant*, N° 286.

AMPELIS, THE CHATTERER.

M. Vaillant ſpeaks in the following animated terms of the birds of this genus.—On few birds has nature beſtowed ſuch elegant and taſty plumage as on the Chatterers. The ſpecies are in general marked with colours the moſt beautiful and beſt aſſorted. The moſt delightful ultramarine blue, violet, carmine, gloſſy green, purple, and the pureſt white, ſeem to diſpute the pleaſure of adorning theſe charming birds, already intereſting by the gentleneſs and innocence of their manners. Even the black and other dull colours come in for their ſhare in ſetting off and enlivening by contraſt the bright and ſhining tints.

But all this magnificence, this luxury of dreſs, is given to the chatterers only for a ſeaſon; that ſeaſon, however, returns every year; it is the ſpring, the ſeaſon of love. Like many other birds in hot countries, the chatterers have their full-dreſs lively only in the pairing-ſeaſon. Their winter garb is as plain as their ſummer one is gaudy; and they are then ſo hard to be diſcriminated, that naturaliſts have not only given us as many different ſpecies as theſe birds have appearances, but have even put individuals of the ſame ſpecies into two or three different genera. Some alſo have erred by placing the chatterers in Africa; they inhabit America only, and chiefly the hotteſt parts, being ſeldom met with beyond Braſil on the ſouth, or farther than Mexico to the north; and the term *cotinga*, appropriated to this genus by the French, ſeems to be a Caribbee word. They appear regularly twice a-year in the cultivated parts of Cayenne and Surinam, where they abound. They are attracted by the ripe fruits; but they feed upon inſects alſo, in ſearch of which they haunt moiſt places, like the thruſhes; hence ſome have conſidered them aquatic birds, and they have been called moor-hens, or coots. Others have confounded them with birds they

they have no greater reſemblance to: for inſtance, Edwards with the manakins, and Salerne with the thruſhes; Klein makes of one of them a ſhrike, of another a ſtarling; and Seba, more abſurdly ſtill, converts one of them into a woodpecker. Vaillant ſeems to diſtinguiſh the *jaſeurs*, chatterers, from the cotingas.

The chatterers (as they are commonly called by us) have a hollowed beak, broad at the baſe; conſequently a large mouth. The upper mandible is ſomewhat bent, and ends in a little hook: this has cauſed them to be confounded with the thruſhes, to which they have ſome reſemblance, and which they follow in ſyſtematic order. The feathers of the forehead fall down over the noſtrils, which are cut lengthwiſe upon the bill; the toes being diſpoſed three before and one behind, and the outer toe before being united to the middle as far as the firſt joint, like the Pipra, or manakin; this has occaſioned them to be confounded with that genus, and we ſometimes find, ſays Vaillant, the male placed in one genus, the female (whoſe ſimple garb is very different) in another, and the young bird (all of the ſame ſpecies) in another. The tail has uniformly twelve feathers; it is ſometimes forked, ſometimes truncated. The wings are generally ſhort.

It is doubtful whether Vaillant has added any new ſpecies to this genus; ſince his *grand cotinga*, hereafter to be deſcribed, is probably our creſted chatterer; and his *cotinga cendré* is a doubtful ſpecies. But he has given very correct and detailed accounts of the ſpecies of chatterers already known; ſome of which we ſhall here preſent to the reader, from the *Hiſt. naturelle des Oiſeaux de l'Amérique et des Indes.*

The POMPADOUR CHATTERER.—This has been already deſcribed in our vol. vii. p. 103. It is very common at Cayenne, where it was called *pacapaca*, which name Vaillant has preſerved: he has given three plates of it, with very minute and correct deſcriptions.

White

White and purple are its only colours. The plumage of the male varies very much like that of the purple throated chatterer, of which more hereafter. The male and female are alike in their infancy; and the female adult never changes. The male and female, in their perfect ſtate, are eaſily diſtinguiſhed from other ſpecies by the narrowneſs and ſtiffneſs of the under wing-coverts, and forming a gutter, the ſmooth elaſtic barbs being all ſeparate, ſo that theſe large coverts form a row of ſtiff points, which appearing beyond the feathers have a pretty effect: they are all dark purple, their ribs white; and the feathers of the wings are pure white. The tail is ſhort, and truncate; the lateral feathers being as long, or very nearly ſo, as the intermediate ones. The wings are full, the feathers being very widely barbed. The body-feathers are very long. This is a general deſcription of the ſpecies. We muſt now give a diſcriminating account of the adult male and female and of the young, ſince the colours vary ſo much, that the young might eaſily be miſtaken for another ſpecies.

The male is of a dark purple upon the head, neck, mantle, back, upper tail-coverts, breaſt, and all the front of the body as far as the belly, and alſo upon the upper wing-coverts; the lower belly, under tail-coverts, and the tail itſelf, are of a lighter purple than the upper ſurface; but all theſe feathers have a luſtre which imparts a ſingular beauty to them, and makes them appear in ſome parts as if glazed. The wing-quills, except the three laſt, (thoſe neareſt to the body, which where viſible are light purple,) are all as white as ſnow; the former have a ſlight edging of brown at their extremities. The under wing-coverts are entirely white, which is the ground-colour of all the plumage. The bill is reddiſh brown; the eyes dark maroon; feet black brown. Such is the male in his perfect ſtate, during the ſeaſon of love. Buffon mentions "a whitiſh ſtreak from the baſe of the bill

on

on each ſide, which paſſing under the eyes, bounds the face." This, Vaillant ſays, does not exiſt; he apprehends the count was deceived by a mutilated or ill-prepared ſpecimen; for, as the feathers are all white at their roots, the ravages of inſects might ſoon produce white ſtreaks any where. The whole face is of a decided purple, and extremely dark; ſo dark indeed, that in certain poſitions it appears black.

The female is rather ſmaller in every dimenſion than the male. She differs chiefly in the colours of her plumage, which partake of thoſe of the young bird, and of the perfect male. The large wing-coverts are formed in the ſame manner, but do not extend beyond the barbs, nor are they ſo long nor ſo dark in colour. The whole upper ſurface is of a brown grey, with a rich vinous tint. The throat, front of the neck, breaſt, and all the under parts as far as the lower belly, are light purple, through which, on the throat and flanks, appears the white which conſtitutes the inner or under part of all the feathers. The under parts of the tail, and its under coverts, are of a vinous grey. The larger wing-quills are dark purple; the inner ones browniſh margined with white. The bill is browniſh grey; the feet blackiſh; the under wing-coverts are white, and all the feathers are white at their roots. This is probably the bird given as a variety in vol. vii. p. 104. of this work. The female is very rarely met with in cabinets; for it is to be obſerved, that collectors of birds for ſale endeavour to catch or ſhoot thoſe that have the moſt beautiful colours, which are generally (and in this ſpecies particularly) the males, becauſe they fetch the beſt price; hence it is that ſo little is known of the females and young. This was deſcribed from a ſpecimen in the cabinet of M. Raye of Amſterdam.

With regard to the young bird, the male and female are perfectly alike; but ſo different from what they are to become, that it is very difficult to know them.

them. Their colour is the moſt ſimple and monotonous, inſtead of that beautiful purple which is afterwards to make them ſo much admired. The whole upper ſurface is cinereous grey; front of the neck and breaſt, flanks, and thighs, lighter; the middle of the ſternum, lower belly, and under tail-coverts, light grey; tail and upper wing-coverts brown-aſh. The eyes are light brown; bill and feet greyiſh. Such are the colours both of male and female when firſt they quit the neſt. After his firſt moult, the male exhibits, on the ground of his former plumage, a purple ſhade ſimilar to the adult female. At the ſecond, his colour grows darker, and ſo on progreſſively till he has acquired his full ſplendour and his white feathers, which does not happen till the third year of his age. During his middle-age, he has a motley garb, conſiſting of feathers ſome of a brown grey mixed with purple, others dark purple, the wings having more or leſs of white feathers among the brown ones, but more of the former as he advances in his moult.

This ſpecies makes ſhort journeys, like the reſt of the genus, and approaches cultivated ſpots at different times to catch the period of ripe fruits upon which it feeds. At Cayenne and at Surinam they are ſeen regularly in March and in September. They alſo frequent woods near rivers, neſting on high trees. The female lays four eggs, which are entirely white, as Vaillant was informed upon good authority.—Ampelis pompadora, *Gmel.* Cotinga pourpre de Cayenne, Pacapac, ou pompadour, *Buff.* Cotinga pacapaca, *Vaillant's Birds of America and India,* N° 31, 32, 33. Buffon deſcribes the female by the name of *Pacapac gris pourpre.*

The Red Chatterer.—Vaillant objects to the name *red*, which he ſays is not diſtinctive enough; for other ſpecies are red, though of different ſhades. Buffon adopts *ouette*, which expreſſes its cry, and it is ſo called by the natives of Cayenne; the inhabitants of Guiana

Guiana call it *arara* or *apira*; and the European coloniſts *cardinal*, which ought to be diſuſed, as being long appropriated to a ſpecies of groſbeak, Loxia cardinalis, a genus very different from the chatterers.

Beſides the characters common to the reſt of the genus, this ſpecies is diſtinguiſhed by "a rounded tail, wings not ſo full, and ſmall downy feathers all along the inner and hinder part of the tarſus, or leg-bone." The fourth and fifth quills of the wing are ſhorter than thoſe which immediately precede and follow them, and alſo narrower, eſpecially the fourth, which is the ſhorteſt. This ſingular conformation, leaving a vacancy in the middle of the wing, muſt probably be an hindrance to the ſpeed of this bird in flight, eſpecially as the wings are beſides very ſhort in themſelves.

This ſpecies is diſtinguiſhed alſo by its colours. The top of the head is covered with narrow ſtiff feathers of the brighteſt red: though the bird has doubtleſs, as Edwards obſerves, the faculty of raiſing theſe feathers by a forced contraction of the ſkin of the head, yet they do not form a permanent creſt, as in the A. criſtatus: at any rate, they look more like a bruſh than a creſt. Over and rather behind the eye appears a kind of black eyebrow, formed by ſome feathers of that colour. The ſides of the head, back of the neck, and back, are of a dark velvet brown; and the ſame colour appears on the breaſt, where however it has more of a rufous tint, and on the front of the neck lighter and waved with rufous. The ſcapular feathers and upper wing-coverts are red brown margined with the violet brown of the back. The primary wing-quills are outwardly of a browniſh black, the reſt like the ſcapulars. The rump, upper tail-coverts which reach half its length, the under coverts, the abdominal region, the bottom of the breaſt, the flanks, and the feathers of the thighs, are of a bright ſcarlet, darker above than underneath the body. The

tail is entirely of the latter colour, except the outer margins of the two lateral feathers and the tips of the reſt, which are reddiſh brown, forming a bar at the extremity of the tail; but underneath the colours are fainter. Buffon ſays theſe quills are "tipt with *black*;" which muſt he an error, perhaps of the preſs. The bill is browniſh red; feet and nails yellowiſh, feathers of the legs very light red; the eyes are ſuppoſed to be yellow.

The female, though ſhe differs materially from the male, yet varies not ſo much as in the ſpecies we have already treated of. The feathers of the top of the head are not ſo narrow; and the fourth and fifth quills of the wing have nothing peculiar in their make. The head is entirely of a brown red, or bronze; which laſt is the colour of the tail, the feathers of which have the upper part of their ribs brown, underneath white. The back and ſides of the neck, the back, ſcapulars, all the wing-coverts, and the wings themſelves, are olive green, with a ſlight ſhade of red or of brown according to the poſition in reſpect to the light. The throat, front of the neck, belly, and thighs, though ſomewhat redder, have the ſame ground-colour as the parts we have mentioned; the upper coverts of the tail are of the ſame colour, but theſe are very ſhort, though in the full-grown male very long. The under plumage is red, but of a much weaker kind than in the adult male. The nails and feet are yellowiſh brown; the lower mandible the ſame, but the upper is a more decided brown. This beautiful ſpecies is very common throughout Guiana; the males are frequently met with in cabinets, the females but ſeldom, no doubt becauſe her colours are leſs ſtriking.

All the ſyſtematic writers have deſcribed this bird, but not all under the ſame genus. In Gmelin's Linnæus it appears twice, the red and the ſcarlet chatterer (Vaillant ſays) being the ſame bird.—Ampelis carnifex,

Ampelis

Ampelis coccinea, *Gmelin's Linnæus.* Red-bird from Surinam, *Edwards*, Pl. 39. Cotinga ouette, ou apira, *Vaillant*, N° 37, 38.

The PURPLE-BREASTED CHATTERER.—A queſtion has ariſen whether this be a diſtinct ſpecies, or a variety of the blue-breaſted chaterer, A. terſa. Some naturaliſts have conſidered the purple-breaſted to be the male, and the blue the female. This opinion, however, ſeems confuted by Vaillant, who makes them two diſtinct ſpecies. His reaſons are theſe:

1. The purple-breaſted is very rare in cabinets; the blue-breaſted extremely common. This is a ſufficient refutation of the idea of the blue being the female of the purple-breaſted, ſince we have already ſaid (and aſſigned the reaſon) that the males are the moſt plentiful in cabinets. Another reaſon why males are moſt common in cabinets it may not be amiſs to ſet down here. The females, both of birds and beaſts, are much more ſhy and timid; they take to flight at the ſmalleſt alarm, while the males more boldly brave the muſket and the net; and therefore, if a man were ſhooting birds and beaſts for ſale, and had determined to fire at all that came in his way, he would kill ten males for three or four females; "and this," ſays Vaillant, "I have experienced repeatedly during more than thirty years on the great theatre of nature."

2. It has not been proved that the purple-breaſted chatterer inhabits Cayenne; the blue-breaſted is very common there. If the former were the male, and the latter the female of the ſame ſpecies, we ſhould find as many of one ſex as of the other; whereas there are not at preſent more than a dozen of the purple-breaſted perhaps in all Europe, while the blue figures in every collection public and private, to the amount of more than a thouſand. During thirty years that I have given my attention to ornithology, I have not found one individual of the purple-breaſted in the collections ſent from Cayenne, which I never fail to examine; and my correſpondents in that country have

repeatedly told me they never met with it there. I know alſo, that the purple-breaſted chatterer is not to be found at Surinam, where the blue ſpecies is as common as at Cayenne. We may conclude therefore, that the purple-breaſted, if it really inhabits Guiana, is extremely rare, and cannot be the male of a ſpecies ſo very common. If the blue ſpecies had been the handſomeſt, we might have ſuppoſed that fowlers would have tranſmitted it in preference; but the direct contrary is the caſe.

The purple-breaſted chatterer inhabits Braſil; and Vaillant could hear of none but what came from that country. It is one third larger than the blue-breaſted chatterer, and the bill is thicker in proportion. In colours the two birds are nearly alike; but the blue is brighter in the preſent ſpecies, and exhibits in certain poſitions ſome greeniſh ſhades on the rump and the flanks. But the grand difference is the blue collar, which croſſes the breaſt from wing to wing, on a beautiful purple ground, which pervades the whole front of the body. The tail and wing-quills are black, their outer barbs fringed with blue.—Ampelis cotinga, *Gmel.* Cotinga cordon bleu, *Vaillant*, N° 41. For the reſt of the ſynonymes, ſee vol. vii. p. 101.

There are many varieties of this beautiful ſpecies; but they are varieties merely of age, ſince no two of them are found perfectly alike; but have been accidentally killed when they had attained different degrees of maturity. One of the prettieſt of theſe varieties is figured in our ſeventh volume, p. 99. It has a complete circle of flame-coloured feathers above the blue collar; and Vaillant is of opinion, that this ſpecies, when young, has the whole of the throat, neck, and breaſt, flame-colour, and that theſe flame-coloured ſpots, ſo differently deſcribed by different writers, are various ſtates of the ſame bird in caſting off by degrees its infant livery. To conclude the diſpute relative to the identity of this ſpecies and the A. terſa,

Vaillant

Vaillant obſerves, that he has ſeen of the blue-breaſted chatterer as many as five hundred ſpecimens, but in no one did he ever diſcover the leaſt trace of the blue collar which ornaments the purple-breaſted.—Variété du cotinga cordon bleu, *Vaillant*, No. 42.

The SILKY CHATTERER.—This ſpecies has been correctly deſcribed, vol. vii. 102. from Briſſon. We have only to add, from Vaillant, that it is rarely met with in cabinets. It inhabits the Maynas, a government of Quito, in South America; and is probably to be found neither at Surinam nor at Cayenne, ſince we never find it in the packets of birds ſent from Guiana. Reaumur ſeems to be the firſt perſon who poſſeſſed the ſpecies in France; from his cabinet Briſſon deſcribed it, and the ſpecimen is now in the muſeum at Paris, but dreadfully disfigured by fumigations of ſulphur to deſtroy the inſects. Similar fumigations have almoſt deſtroyed the collection formerly called the King of France's Cabinet. Happily, thoſe proceſſes are now laid aſide.—Ampelis Maynana, *Gmel.* Cotinga à plumes ſoyeuſes, ou Cotinga du Maynas, *Vaillant's Birds of America and India;* N° 43.

The PURPLE-THROATED CHATTERER.—This is a beautiful ſpecies, about the ſize of a blackbird; the largeſt individuals being eight inches in extreme length, but ſome hardly attain ſix. Rich purple, green mixed with aigue-marine and black, are the only colours which adorn the plumage; but theſe are ſo agreeably interwoven and contraſted, as to form one of the moſt beautiful objects that adorn our cabinets. Purple, with a tint of violet, plays on the throat and front of the neck, forming a kind of cravat, which terminates circularly at the breaſt, but in ſome individuals does not reach ſo low: all theſe feathers are white at their roots, but to perceive that colour they muſt be raiſed up. The top of the head, cheeks, back and ſides of the neck, back, rump, upper tail-coverts, and all the under parts, from breaſt to tail, are of the

brighteſt

brighteſt aigue-marine green; but this green varies wonderfully, being more or leſs ſhining, more or leſs green; ſometimes it appears blue, according as the rays of light fall more or leſs intenſely or obliquely upon them; ſo that ſome writers deſignate this colour by the name of aigue-marine blue. All the feathers of theſe parts being green (or blue) at their points only, and having part of their middle abſolutely black, the leaſt change of poſition makes the black come more into play, eſpecially on the hind-head, neck, and back, where, the feathers being more apart, an agreeable undulation, a perpetual diverſity, is produced. The under part of the body is of a more uniform colour, not only becauſe the green occupies more ſpace, but becauſe the feathers lie cloſer one over the other; they are, however, black in the middle, and light brown at their roots, like all thoſe on the upper ſurface. The ſcapular feathers are abſolutely black, but each ſurrounded with a green edging, which breaks them off like rounded ſcales. The tail, which is ſquare, conſiſts of twelve feathers, of which the firſt on each ſide is entirely black; but the others have a ſlight tinge of the ſame green as the back all along their outer margins. The wings are moſtly black, and when at reſt reach but a little way beyond the ſetting on of the tail; but they have this peculiarity, that their two firſt feathers are very narrow; the firſt of theſe is entirely black, but the other is margined with green; the reſt are ſimilarly margined on a black ground, and the coverts, upper and under, are largely fringed with green. The bill, feet, and nails, are black; the eyes brown. Such is the male in his perfect ſtate; but he undergoes ſeveral changes before he attains it.

The young bird is of a light brown colour on the throat and front of the neck; the breaſt and flanks are of the ſame hue, but with light rufous round their edges, ſhowing like ſcales. The belly and under tail-coverts are moſtly rufous, but variegated with lighter tints.

tints. The top of the head, back of the neck, mantle, back, rump, and upper tail-coverts, are of a darker brown than the under parts of the body; and each feather of these parts has at its extremity a spot, or else an edging, of obscure red, but which is more evident on the wing-coverts, and on the margins of their large feathers, which, as well as those of the tail, are of a darker brown than the other parts. The bill, feet, and nails, are brown.

Notwithstanding the above description, and the figure given by Vaillant, many persons, who are not aware of the various changes birds undergo, would doubt whether this could possibly be of the species described for the adult bird, or could ever attain such beautiful plumage. Buffon himself mistook it at this age, and has described and figured it under the name of Cayenne thrush. (See our vol. vii. p. 48.)

Nothing however is more certain than the identity we have spoken of; and we are now to consider the same individual in his middle age, when, without losing his infant garb, he begins to show the dawn of that beautiful plumage which is to adorn him entirely at the period that nature has fixed for the reproduction of his species. The purple feathers begin to appear on the throat, and the green on the points of those on the head, breast, belly, &c. some of the black feathers of the wings are already visible. It will be readily understood, that the bird appears every day somewhat different from the preceding evening, because every day the old feathers are giving way to new ones. Following the same individual in his natural course, we shall at length find him in his full dress, his wedding suit as Vaillant calls it; but this he keeps only till the following moult, or till his young progeny have flown off to provide for themselves. Then he loses his brilliant attire, and becomes so like the female, (which we are going to describe,) that, were it not for his size, it would be very difficult indeed to distinguish him;

him; for the females of this genus are always ſomething leſs than the males.

The female is in general about an inch ſhorter than the male, and all her dimenſions are in the ſame proportion. In colour ſhe ſeems to participate equally with the adult male and the young one, but rather inclining to reſemble the latter, as indeed is the caſe with moſt birds. The young male and young female are alike; but the female, when once completely clothed, never changes her hues. On all the upper ſurface ſhe is of a blackiſh brown, with a ſlight tinge of green, more evident on the rump and the coverts of the tail, and ſtill deeper on the margin of each feather. The biggeſt feathers of the large wing-coverts are edged with green; the reſt are rufous at their points, with green at their roots; the larger under coverts are light red. The throat and front of the neck are mottled grey, mixed with light green; breaſt the ſame, but rather darker; the margins of the feathers on the upper part of the breaſt, are faint green, but on the lower parts and flanks reddiſh; on the lower belly and under tail-coverts the colours are nearly the ſame, the feathers ſlightly margined with green. The tail-feathers are all brown, with a line of green, and obſcure rufous at their points. Bill, feet, and nails, blackiſh.

This ſpecies is very common throughout Guiana, and eſpecially at Cayenne, whence ſo many have been ſent to Europe, that there is hardly a cabinet without one. The males indeed are chiefly tranſmitted, on account of their beauty; the female and young have been ſo generally neglected, that the hiſtory of this ſpecies, indeed of the whole genus, has been in conſequence very incomplete. For this reaſon we have enlarged much upon this ſpecies, which Vaillant has elucidated with no leſs than four plates.—Ampelis Cayana, *Gmel.* Cotinga quereiva, *Vaillant's Birds of America and India*, N° 27, 28, 29, 30. For the reſt of the ſynonymes, ſee vol. vii. p. 101. The

The BLUE-BREASTED CHATTERER.—This is a very beautiful ſpecies, and very common at Cayenne, whence they are continually tranſmitted in plenty. It reſembles the purple-throated chatterer, A. Cayana, but upon a ſmaller ſcale; and undergoes the ſame changes at the different periods of its life. But its marks of diſtinction have been amply ſhown at p. 374.

The male, when arrived at its perfect plumage, is of a bright ultramarine blue, heightened with an occaſional tint of violet. This reſplendent colour prevails all over the head, neck, ſhoulders, back, rump, upper and under tail-coverts, as well as on the flanks and ſmaller wing-coverts; the larger coverts are black, but margined with the ſame blue. The throat, front of the neck, and breaſt, as far as the middle of the body, are of a fine purple inclining to violet. The wing and tail quills are black, moſtly edged with blue; the under parts of the wing and tail are black, ſhining or glazed with light grey. The eyes are reddiſh brown; bill and feet black. The male does not acquire theſe rich tints till after his third moult.

The female, Vaillant ſays, has never been deſcribed by any preceding writer; and in cabinets is very rare, probably for the reaſons we have mentioned elſewhere; and, if met with, would probably be taken for a bird of another ſpecies; and perhaps it has already been figured or disfigured by ſome ſyſtematic writer under another genus. This female is ſomewhat ſmaller than the male in all her proportions; but the colour of her bill, eyes, feet, and nails, are ſimilar. The top of the head, back of the neck, mantle, back, rump, upper tail and wing coverts, are black, inclining to browniſh on the upper parts, and to greeniſh blue on the lower, and on the rump, on which laſt part it is more apparent, eſpecially in a certain light; but this monotonous colour is moſt agreeably enlivened by every feather being tipped with white; on the top of the head, the white is very ſcanty, but it increaſes

on the feathers downwards towards the tail, and on the large coverts of the wings it becomes a pretty broad patch. The primary wing-quills are blackiſh, the ſecondaries are bordered with rufous, the reſt with white. The tail is black inclining to brown, with a ſlight tinge of rufous at the tips; the ſame is the colour of the throat, but in ſome lights a certain tinge of purple is perceived. The breaſt and ſides are browniſh black, tipped with white ſo as to appear like ſcales. The lower belly and under tail-coverts are of a very faint red, undulated with light brown towards the vent. The under wing-coverts are reddiſh with a few diſtant ſpots of brown; the under parts of the wing-quills have an edging of the ſame colour on their outer barbs. Such is the perfect ſtate of the female.

The young bird reſembles the female adult rather than the male. The top of the head, back of the neck, mantle, and tail, are of an uniform brown; the upper wing and tail coverts, the plumage of the throat, breaſt, ſides of the neck and head, belly, and flanks, are all of a ſimilar brown, with rufous tips like ſcales. The wings and tail are underneath of a faint dun-colour. The bill and feet are brown. Such is the livery of both male and female when firſt they quit the neſt. At the firſt moult, the male alone receives a few bluiſh feathers in all thoſe parts which are hereafter to become entirely blue; and thoſe parts which are to be purple, now receive a few tints of that beautiful colour. At this moment alſo we may begin to diſtinguiſh the ſexes; and the mixture of colours produces a very agreeable effect.—Ampelis terſa, *Gmel.* Cotinga bleu, *Vaillant's Bird of America and India*, N° 34, 35, 36.

There is a beautiful (male) variety of this ſpecies in the cabinet of M. Temminck at Amſterdam. It is diſtinguiſhed by having on each ſide, juſt below the pinion, a large ſpot of vermilion which reaches to the middle of the flank.

The

The CARUNCULATED CHATTERER.—Bearing in mind our account of this bird in vol. vii. p. 105. we muſt now obſerve, that we there copied ſome errors from Buffon, which have been ſince corrected by Vaillant. The caruncle, round, wrinkled, and muſcular, ſprings not from the bill, but from the forehead above the bill, and hangs negligently on either ſide of the baſe of the bill. Buffon tells us, that this caruncle is inflated and raiſed at the will of the bird; an error which has ariſen from the manner in which it has generally been prepared for ſale, namely by introducing a ſtick or a wire through the ſkull and palate into the caruncle, to make it ſtand up. Buffon therefore ſuppoſed the part to be hollow. But Vaillant, having received a complete ſpecimen from Surinam, in ſpirit of wine, cut the caruncle in two, and found it preciſely the ſame as the wattle of the turkey-cock, except that it is covered with minute convex rounded ſtiff feathers, juſt like thoſe of the arched valve of the pectinata ſhells; ſo that this part, when lengthened and erected, looks, like thoſe branches of madrepora covered with little ſhells which are ſo common in cabinets. Nor can we tell whether the bird has really the faculty of erecting this caruncle, or only, like the turkey, of inflating and lengthening it downwards; the muſcles of which it conſiſts might produce either effect. But it is certain that there is no communication, as Buffon aſſerts, between the palate and the caruncle; for the caruncle is exactly at the beginning of the forehead; and there is a ſmall ſocket in that place, and the frontal bone is furrowed all along, and divided as it were into two equal parts, as may be eaſily felt in paſſing the finger along the head. Vaillant therefore ſuppoſes this cavity may be intended to receive the caruncle when it riſes; and that, inſtead of ſtanding erect, it only lies occaſionally flat upon the head. The caruncle, in the ſpecimen which Vaillant examined, was of a conical ſhape, nine

or ten lines long, and four in circumference at the baſe, and ending in a point; but it was ſo elaſtic, that it might be pulled to the length of near two inches. The feathers join when the caruncle is at reſt, but when lengthened void ſpaces appear between them, as in the Plate.

The bill is flat, the mouth very large, the legs ſhort; the tail a little forked, not (as Buffon aſſerts) equal; the wings reach about one-third its length. The plumage of the perfect male is of the pureſt white in every part, unmixed with thoſe tints of yellow mentioned by Buffon, who took his deſcription from a bird that had not completed his laſt moult. The bill and feet are black; colour of the eyes not known.

Buffon ſays the female has the caruncle alſo, which is not true; he took his deſcription from a young male which had made his firſt moult, and which reſembles the female in many reſpects. Vaillant examined this ſuppoſed female in the Jardin des Plantes, at Paris.

The female is nearly the ſize of the male; but differs in colours, and has no caruncle. The upper ſurface is moſtly of a browniſh olive-green; the laſt wing-quills are margined with yellow; the primary wing and tail quills are browner, with a delicate edging of olive. The front and under parts are olive green, mixed with yellowiſh white, growing lighter and lighter towards the belly and thighs, which are white ſlightly tinged with yellow; the under wing and tail coverts are white. Legs and feet black; the upper mandible is black alſo; the under one yellowiſh grey at the baſe, black at the tip.

This ſpecies is found at Cayenne, and throughout all Guiana; alſo at Braſil. Vaillant was informed by his correſpondent at Surinam, that they arrive in that country with the other chatterers, feed on the ſame fruits, and build on the ſame trees; they are fond of loſty trees, and lay four greyiſh eggs. The female is very

very rarely met with in cabinets. De Laet firſt deſcribed the ſpecies.—Ampelis carunculata, *Gmel.* Guira panga, ou cotinga blanc, *De Laet* and *Buff.* Cotinga caronculé, ou guira-panga, *Vaillant*, N° 39, 40.

The CINEREOUS CHATTERER.—This has none of the gay attire of the chatterers in general, and is rarely met with in cabinets. It is about the ſize of the purple-throated chatterer; but its tail, whoſe feathers are equal, is longer, which gives it a more ſlender appearance. The wings reach very little beyond the ſetting-on of the tail. The whole upper ſurface is of a dark cinereous grey; front and under parts light grey, tail-feathers almoſt white underneath, bill, feet, and nails, browniſh black; colour of the eyes not known. Deſcribed by Vaillant from a ſpecimen in the cabinet of M. Dufrene, aſſiſtant-naturaliſt at the Paris muſeum. Since the chatterers in general have ſuch bright plumage, might not this be a female, or a young bird?—Ampelis cinerea, *Ency. Lond.* Cotinga cendré, *Vaillant's Birds of America and India.*

The YELLOW CHATTERER.—Above olive-brown; beneath, rump and lateral tail-feathers pale yellow; ſpot on the jaws white. Length ſix inches and a half. Bill black; legs blackiſh; belly whitiſh on the hind-parts; two upper tail-feathers black, yellow at the origin and tipt with yellowiſh, the reſt yellowiſh-brown.—Ampelis lutea, *Turton's Linn.*

The GREAT CHATTERER.—This is the largeſt of the genus, and hitherto (ſays Vaillant) unknown. It is near fifteen inches from the point of the bill to the tip of the tail; which is broad and even, all the feathers being of the ſame length. The bill is two inches long, and one broad at the baſe; the mouth therefore is large, and beſet at the ſides with ſtiff hairs. The noſtrils, which are about the middle of the bill, are entirely hid by the delicate feathers which ſpring from the forehead. The wings are eight inches long, and reach to the middle of the tail. It has a beautiful creſt

creſt of red and black feathers riſing from the forehead; and, the feathers on the neck are ſimilar to thoſe of the creſt, but longer, and fall looſely down on the breaſt. The head is very large. The upper ſurface of the wing and tail feathers is browniſh black, but underneath they are light grey. All the reſt of the plumage is ſcarlet, of greater or leſs intenſity; ſo dark on the head and back as in ſome lights to appear almoſt black; but the roots of all the red feathers are white. The bill is crimſon; feet and legs almoſt black. Colour of the eyes not known, but ſuppoſed to be red.

The female in this, as in all the ſpecies, is ſmaller than the male; but in colours totally different. Her creſt is not ſo full, the feathers being ſhorter. The upper ſurface of the body is of a dark cinereous grey; the under parts, as breaſt, belly, under tail-coverts, &c. are white tinged with cinereous; the bill, feet, and nails, are brown.

This ſpecies inhabits French and Dutch Guiana; and was obſerved by M. Renaud at Surinam, who ſays it is extremely ſhy, and keeps at a diſtance from the haunts of men; it is conſequently a rare ſpecies. It feeds on fruits; but the ſize of its bill and the ſtiff hairs at the corners of the mouth, like the fly-catchers, incline Vaillant to think that it feeds on inſects alſo. —Grand cotinga, *Vaillant's Birds of America and India*, N° 25, 26.

The Crested Chatterer of America.—This has been ſlightly noticed at vol. vii. p. 107. We ſhall here give a more detailed account of it from the Encyclopædia Londinenſis, with a figure; from which we think the reader will agree with us, as hinted at the beginning of this article, p. 365, that it is the ſame with the great chatterer juſt deſcribed from Vaillant: it is perhaps that bird in what he calls its middle age, i. e. previous to its poſſeſſing its full and complete plumage.

The

AMPELIS.

Edwards del.t

Pass sculp.t

The Crested Chatterer of America.

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The bill is ſhort, a little arched, and of a duſky colour. Round the baſe of the upper mandible are ſmall black feathers, which form a bar reaching beyond the eyes, which are of a beautiful red, and ſhine with uncommon luſtre. It has long feathers on the crown of the head, which it can raiſe into a creſt, and let fall at pleaſure. The head and neck are of a reddiſh brown or bay colour, the breaſt inclines to white; the belly and thighs are of a pale yellow; the covert-feathers beneath the tail are whitiſh; the back is of a rich brown colour; the rump and covert-feathers on the upper ſide of the tail, and wings, are of a light aſh-colour; the three innermoſt quills on each wing next the back have their inner webs white to the tips; ſeven of the middle quills in each wing have ſmall oblong flat pallets or horny ſubſtances hanging to their tips, of the colour and gloſs of the fineſt red ſealing-wax; the tips of the tail-feathers are of a fine golden yellow; and the legs, feet, and claws, are black.—Ampelis criſtata, *Gmel.* from *Miller Illuſtrat.* t. 15. C. Creſted chatterer of America, *Ency. Lond.*

COLIUS, THE COLY.

Our notices of this genus, vol. vii. p. 108, were very ſcanty; but M. Vaillant has enabled us now to ſupply the deficiency, by the following particulars.

The colies live upon fruits only, not meddling with grain or inſects. They go in flocks, and do not live apart even during the time of incubation, but build their neſts cloſe together in th ſame buſh. In the ſame buſh likewiſe they collect to rooſt; and they ſleep in a very ſingular poſture, namely, ſuſpended from the branches, head downwards, and as cloſe together as a ſwarm of bees; and thus a great many of them are ſometimes taken in a lump. They are very ſtupid birds: if one be put into an aviary, he ſquats down in a corner, or ſuſpends himſelf by his feet againſt the ceiling or ſides of the place, with his head downward. They are never

ver ſeen perched like other birds, much leſs hopping from branch to branch; neither are they nimble walkers, for they reſt upon their legs rather than their feet, with their belly on the ground. They are very fleſhy, and weigh twice as much as ſome birds that look as big; but the fact is, that the colies, having very ſhort feathers which lie cloſe to the body, are really larger than they appear. Their wings are weak, and their flight very dull and heavy; in flying from buſh to buſh, they ſeem rather to fall than to fly; for they do not preſerve their height in the air, but generally alight at the bottom, and then climb up, their bill aſſiſting them in the manner of parrots. Birds of prey make great havock among them, as they are ſo eaſily caught, and beſides are delicate eating. At the Cape they are called *muys-voogel*, mouſe-bird, their plumage being ſoft and ſilky. Theſe birds are extremely injurious to the gardens about the Cape; they not only eat all kinds of fruit, but deſtroy the buds of trees, and attack the pot-herbs as faſt as they come out of the ground: if you lay buſhes over the beds, it is of no avail; for theſe birds get in between the ſticks or branches, and, as they moſtly come in flocks, a bed is cleared in a few minutes.

In this genus the wings are ſmall, and when at reſt reach very little beyond the ſetting-on of the tail. The tail conſiſts of twelve feathers very unequal in length; the firſt on each ſide being ſo ſmall and weak as to be almoſt uſeleſs, while the two in the middle are ſometimes near a foot long. The plumage of the body is in general ſhort and ſoft, like the hair of the ſmaller quadrupeds. The legs are ſtout, the claws ſtrong: the toes are three before and one behind; but the hind one is ſo near to the inner front one, that the bird often turns it forward when he finds it needful in climbing or for ſuſpending himſelf; ſo that this might be called a ſide-toe rather than a hind-toe.

M. Vaillant has given us no abſolutely-new ſpecies of

of Coly, he has even reduced the ſeven ſpecies we had to five, ſince he pronounces the Rayed Coly and Panayan Coly to be the ſame, and unites alſo the Cape Coly and the White-backed Coly. The following he conſiders to be a variety of the Rayed Coly.

Rayed Coly with a Black Throat.—This variety, or ſpecies, whichever it may be conſidered, is the largeſt of the genus: it is equal in bulk to the Emberiza citrinella, or yellow-hammer; and its total length, from the point of the bill to the tip of the tail, is fourteen inches, the tail meaſuring eight. The diſtinguiſhing characters are, "a black ſtripe round the forehead, paſſing between the eyes and the bill, and ſtretching over the throat and part of the neck; and the legs and feet bright red." The tuft or creſt is light grey ſtained with a vinous tint; the reſt of the upper ſurface is brown, darker upon the wings than elſewhere; the ſides of the neck, and moſt of the under parts, are of a reddiſh brown, with regular but faint tranſverſe bars of black. The upper mandible of the bill is black; the lower was yellowiſh white in the dead ſpecimen that Vaillant examined; but he ſuſpects it to have been red in the living bird, from the circumſtance of the legs being of a bright red, as we mentioned before; the nails are black. Colour of the eyes not known. Inhabits Angola and Malymba in Africa.—Coliou rayé à gorge noire, *Vaillant's African Birds*, N° 259.

LOXIA, the GROSBEAK, &c.

The Sumatra Grosbeak.—Yellowiſh; front and eyebrows pale-yellow; quill and tail feathers black, edged with yellowiſh. Bill pale; irids rufous; legs pale. Inhabits Sumatra; five inches long.—Loxia hypoxantha, the Sumatra groſbeak, *Turton's Linn.*

The Ash-headed Grosbeak:—Blackiſh, beneath whitiſh; head and neck cinereous; tail tipt with white. Bill and legs blue. Inhabits India: very

ſmall.—Loxia Indica, the aſh-headed groſbeak, *Turton*, who has changed the name of Gmelin's *Indica* to *Boetonenſis*.

The Sociable Grosbeak.—Ruſous brown, beneath yellowiſh; frontlet black; tail ſhort. Bill black; region of the ears yellowiſh; legs brown. Inhabits the interior parts of the Cape of Good Hope: five inches and a half long. Theſe live together in vaſt tribes under one common roof, containing their ſeveral neſts, which is built on a large ſpecies of mimoſa.—Loxia ſocia, *Turton*.

The Ceylon Grosbeak.—Ferruginous-brown, beneath purple, waved with black; front and rump bluiſh. Bill and legs reddiſh-brown; hind-head, back and long quill-feathers brown; tail ruſty-brown tipt with white; wing-coverts ſlightly edged and tipped with white, thoſe neareſt the back with bluiſh-aſh; vent white. Female, head, neck, and body beneath, bright ferruginous; wings brown; tail beneath aſh-colour. Inhabits Ceylon.—Loxia Zeylonica, *Turton*, from *Cim. Phyſ.* t. 42. p. 80.

The Hudson's-Bay Grosbeak.—Brown; belly white; ſides ſpotted with brown; wing-coverts with two red bands. Short, ſtrong, bill and legs brown; feathers of the back and rump, ſecondary quill and tail feathers, edged with pale ruſous; tail a little forked. Inhabits Hudſon's Bay; five inches long.—Loxia Hudſonica, *Turton*.

The Crimson-crested Grosbeak.—Black; wings with a white ſpot; hind-head with a crimſon creſt-like band. Bill very thick and ſtrong.—Loxia regulus, the crimſon-creſted groſbeak, *Turton*, from *Lev. Muſ.* p. 46.

The New-Holland Grosbeak.—Brown; breaſt black; bill and rump red; ſides of the body black ſpotted with white. Inhabits New Holland.—Loxia guttata, *Turton*, from *Lev. Muſ.* ii. 48.

The

The RED-RUMPED GROSBEAK.—Olive-green, beneath yellowiſh-hoary; rump red; legs yellow, (male.) Olive-brown, beneath yellowiſh-hoary; rump pale red; legs yellow, (female.)

Male; bill black; tail-feathers black, the two middle ones on the upper ſurface, and eight on the outer edge red. Female; bill above black, beneath yellowiſh; wings with yellowiſh-white bands; quill-feathers cinereous, the eight ſecondary on the anterior edge whitiſh at the tips: tail-feathers black, tipt with white. Inhabits Java; length five inches.—Loxia praſina, the red-rumped groſbeak, *Turton.*

EMBERIZA, THE BUNTING.

The YELLOW-WINGED BUNTING. — Reddiſh-brown, beneath white: breaſt and leſſer wing-coverts yellow: throat with a brown band. Bill brown; ſides of the head white; quill and tail feathers edged with yellow; legs yellow. Inhabits Falkland Iſlands: ſize of the yellow hammer.—Emberiza chryſoptera, *Turton's Linn.*

The ASTRACAN REED-BUNTING.—White; wings duſky; firſt tail-feathers each ſide white; ſecond half white, half black; tail even. Inhabits Aſtracan, in marſhy and reedy places; and is probably a variety of the reed-bunting, E. ſchæniclus, vol. vii. p. 160.—Emberiza arundinacea, *Gmel.* from *S. G. Gmel.* E. ſchæniclus, var. 3. *Turton's Linn.*

The IMPERIAL BUNTING.—Black; ſhoulders red, banded with white; quill-feathers brown; tail long, the middle feathers extremely long. Bill and legs duſky-brown; long tail-feathers reſembling thoſe of the *paradiſca*, and are wanting in the female, and in the male in winter. Inhabits Africa.—Emberiza imperialis, *Turton*, from *Cim. Phyſ.* 7. tab. 3.

The MIXED BUNTING.—Grey; breaſt and throat blue; belly white. Bill pale, lower mandible at the

ſides of the baſe gibbous; body above grey with here and there a bluiſh gloſs; feathers of the belly brown at the baſe; thighs grey with a few bluiſh feathers; legs pale. Inhabits China.—Emberiza mixta, *Turton.*

TANAGRA, THE TANAGER.

The UNSOCIABLE TANAGER.—Green; head and body beneath hoary; eyebrows, ocular band, and one acroſs the throat, black. Bill black; legs brown; chin white; ſhoulders yellow. Inhabits the thickeſt woods of Guiana; is ſolitary, and builds its neſt moſtly on the ground.—Tanagra ſiliens, *Turton's Linn.*

FRINGILLA, THE FINCHES.

The LULEAN FINCH.—Brown; breaſt and ſhoulders rufous; wings black with a rufous ſpot; ſize of the goldfinch; bill brown; head and neck above blackiſh-aſh: throat white; belly and vent whitiſh; wing-coverts with alternate rufous and black bands, the laſt white; quill-feathers black; tail dark cinereous. Inhabits Sweden.—Fringilla Lulenſis, *Linn.* and *Gmel.* Chardonneret à quatre raies, *Buff.* Lulean finch, *Penn.* and *Lath.*

The FORKED-TAILED FINCH.—Neck, breaſt, and rump, pale yellow; back olive; tail long, forked, bluiſh-black; head with a black pendent creſt. Dr. Shaw doubts whether it might not with more propriety be conſidered as a ſpecies of Muſcicapa, or fly-catcher. Inhabits Ceylon.—Fringilla forficata, *Turton's Linn.*

The LOVELY FINCH.—Colour green; chin and throat yellowiſh; belly barred with white and black; bill and legs red; tail-feathers blackiſh. Perhaps the other ſex of the elegant finch, deſcribed vol. vii. p. 223. It inhabits India.—Fringilla formoſa, *Turton's Linn.*

The SHARP-TAILED FINCH.—Varied with rufous and

and brown; eyebrows, chin, and neck above, rufous; tail entire, the feathers all pointed at the tips; length four inches and a half; bill and legs pale; irides brown; feathers of the body brown, edged with pale rufous; chin and ſtreak above the eyes pale rufous. Inhabits Georgia. — Fringilla caudacuta, *Turton's Linn.*

The GEORGIAN FINCH.—Brown, beneath whitiſh; ſmaller wing-coverts wholly, quill and tail feathers on the outer webs, rufous; chin and throat mouſe-colour; under the arm-pits a black ſtreak: length ſix inches; bill duſky; irides brown; head brown, a little tumid; middle of the back blackiſh; legs brown. Inhabits Georgia.—Fringilla Georgiana, *Turton's Linn.*

The CAROLINA BLACK-FACED FINCH.— Five inches and a half long; red-brown; belly white; face and pectoral band black; throat and rump ſcarlet; bill and legs browniſh; wings black; tail ſhort. Inhabits Carolina.—Fringilla Carolinenſis, *Turton's Linn.*

MUSCICAPA, THE FLYCATCHER.

Few genera, according to M. Vaillant, have been more confounded with others than the flycatchers properly ſo called; that is to ſay, thoſe whoſe chief food is flies and other inſects caught upon the wing, either by lying in wait for them, or purſuing them as the ſhrikes do their prey. The ſpecies of this genus, therefore, though very numerous, are continually confounded with the pipits, the wagtails, warblers, &c.

The flycatchers in their habits greatly reſemble the ſhrikes, and are to be conſidered as real birds of prey, of a lower order, and might be ranked immediately after the ſmalleſt of thoſe kinds which purſue birds weaker than themſelves, to feed upon their fleſh.

They are well diſtinguiſhed by a flat bill widening towards the baſe; the upper mandible is triangular, divided in the middle of its length by a ſharp long ridge, which reaching to the tip forms a hook ſimilar in form to that of all the carnivorous tribe.

The

The feathers of the front of the head come very forward upon the bill, partly covering the noſtrils, which lie very forward, ſo that theſe birds appear to have a very long roſtrum, from which character, the great Linnæus miſtook one of the long-tailed flycatchers for a paradiſe raven. The ſides of the mandibles are armed with long ſtiff briſtles. "I uſe the word *armed*," ſays Vaillant, "ſince they are of the utmoſt importance to them in their chace after winged inſects. Theſe briſtles are at the baſe of the mandibles; they incline obliquely inwards, thoſe of the upper mandible hanging downwards, and thoſe of the lower riſing in an oppoſite direction, ſo that, when the bird opens its bill, they join acroſs, and form a net on each ſide the mouth; when therefore this bird purſues a fly, if the little animal once gets in the direction of the open mouth, it can hardly eſcape, but muſt be engulphed by the bird continuing its courſe, for it cannot avoid the net by turning on either ſide. It often happens, indeed, when the bird ſhuts its mouth to ſecure the fly, that the latter is left on one ſide between the bill and the briſtles, and is ſometimes ſo fortunate as to eſcape; not very frequently however, for the bird, miſſing its prey, preſently opens its mouth, and makes a chop on that ſide where the poor fly is ſtruggling to diſengage itſelf from the net-work, where it is entangled as in a ſpider's web. The noiſe the fly-catcher makes in ſhutting its mouth may be diſtinctly heard at a hundred paces diſtance in calm weather.

The ſame fierce and cruel diſpoſition may be obſerved in theſe birds as in the ſhrikes. Like them, they are quarrelſome and revengeful; like them alſo they fix upon a certain diſtrict, from which they exclude, as much as their ſtrength will permit, not only all other birds that feed upon inſects, but even their own ſpecies. They confine themſelves chiefly to one ſpot, and upon a bare branch of a ſolitary tree they ſit watching for their prey, and we may obſerve in all the ſpecies of flycatcher that upright attitude which is common,

not

not only to the ſhrikes, but to all carnivorous birds, and in general to all that remain long in the ſame place watching for their prey. The flycatchers have the tarſus rather ſhort than long; claws hooked, and very ſharp; and the ſole of the foot broad. They have large bright eyes, and can diſcern ſmall inſects at a very conſiderable diſtance. They are naturally ſhy, and very difficult of approach; they have no ſong, but utter a ſharp and plaintive cry.

Vaillant obſerves, that only one ſpecies of flycatcher properly ſo called is known in France, the Muſcicapa griſola, or ſpotted flycatcher, which is very common in the environs of Paris, but only during ſummer. As for the M. torquata, or collared flycatcher, and many others, they do not anſwer the generic character, nor do they ſeek their food in the ſame manner, but run about from tree to tree, and pick out little inſects and larvæ, like the wagtails, not having the large mouth and briſtly network proper for catching inſects on the wing.

Still the manners and habits of the real flycatchers, as well as their conformation, are very various, and therefore Vaillant divides them into ſeveral ſections. Some have beautiful large tufts; and their tails differ greatly in ſhape; in ſome it is ſquare, in others tapered or graduated, *(etagée,)* like our magpie; ſeveral ſpecies have two long filaments in the middle of the tail, like ſome of the parakeets; others have it forked, like our ſwallows; while others have filaments on each ſide, as in ſome of the rollers. In ſhort, all the forms of tail which nature has divided among birds in general are united in this ſingle genus; a circumſtance which greatly facilitates the diſtribution of the ſpecies into diviſions.

The PARADISE FLYCATCHER.—This beautiful ſpecies has been deſcribed by us from Briſſon and Buffon; but Vaillant ſays the figure is very incorrect, both as to the colour and the ſhape of the bill, which

rather

rather reſembles that of a blackbird than of a flycatcher. And both theſe writers (he adds) have deſcribed the female only, or the young male, ſince they omit to mention the two long feathers in the middle of the tail, which characteriſe the male of this ſpecies, in its perfect ſtate. Briſſon, indeed, in his Supplement, corrects his miſtake by ſaying that the bird has a long tail, which Buffon, who confounds this ſpecies with another, contradicts.

The paradiſe fly-catcher, at its full ſize, preſents the figure nearly of our ſparrow, (Fringilla domeſtica;) but it is ſomewhat longer, and therefore of a more ſlender appearance. The head is ornamented with a tuft, or creſt, conſiſting of long ſtiff feathers, reaching more than half an inch farther back than the occiput, but not falling down on the neck, as incorrectly repreſented in Buffon's plates. See our Plate, vol. vii. p. 304. The creſt, the front feathers which come down over the noſtrils, and the neck, are dark green, which reflect tints of black or of ſteel-blue, according as the rays of light ſtrike upon them. The breaſt is white mingled with grey, but whiter on the under parts, and quite white on the flanks, belly, thighs, and under tail-coverts. The back, rump, wings, and tail are bright red, except ſome black about the outer edges of the wing-quills. The tail is much tapered, and the two middle feathers are ſometimes four or five times as long as the body, even to the length of two-and-twenty inches; but in cabinets we find them of various lengths, from the circumſtance of the birds ſeldom being killed at the time of their feathers attaining their full length, which is only at a particular ſeaſon. The bill is ſtrongly beſet with briſtly hairs, and is at its baſe of a lead-colour; feet the ſame. In ſeveral collections the contour of the eye is painted red, in ſome blue; but its real colour Vaillant could not decide, not having ſeen the living bird.

The female is ſomewhat ſmaller; has no long feathers

thers in the tail; red colour not ſo bright, creſt ſmaller and flatter, but very viſible.

Whether the male has the long feathers in the tail only in the pairing ſeaſon is not certain, but it is moſt probable. Certain it is, however, that *he changes his colour;* for Vaillant gives us the figure of one entirely white, which he affirms to be a male of this ſpecies; and he propoſes the following queſtions for the conſideration of naturaliſts who may have opportunities of obſerving the ſpecies in their native haunts: Does this bird aſſume a white garb every year at a certain ſeaſon; or only once for all at a certain age? Does it change from white to red, or from red to white?

Buffon had already obſerved this change, and he corrects Briſſon for giving the white bird under another name, no doubt conſidering it as a diſtinct ſpecies, though he does not ſay ſo. But Buffon, while he detects this error, directly falls into another, giving the white bird as the female, and the red one as the male of the ſame ſpecies; for Vaillant had ſeen white males as well as red ones, all with long tails, and females reſembling both theſe exactly, except that they wanted the two long tail-feathers. Of this he was fully convinced by the diſſection of nine of theſe birds ſent him from Columbo in a perfect ſtate by an officer who had ſerved five-and-twenty years at Ceylon; and he obſerved alſo that they had not the thick fleſhy eyelid of the preceding ſpecies.

This bird, in its white garb, does not change the colour of the head, creſt, and neck; but all the under ſurface of the body, from the bottom of the neck to the under tail-coverts, as well as the back, rump, and upper coverts of the tail, are as white as ſnow; the ſcapulars are white alſo, but the ſides of the quills are black; the ſmaller and greater wing-coverts are partly black and partly white, as well as the quills of the wings, producing an agreeable mixture of thoſe two colours in longitudinal ſtripes. The two long

middle-feathers of the tail are entirely white, except that the ribs of the quills are black; and frequently they have a black ſpot at the end. The lateral tail-quills are moſtly white; like the middle ones, their ribs are black, and they have a black line on their outer barbs, which line becomes broader as the feathers approach the centre. Bill and legs bluiſh, as before.

The female has leſs black, the ſtripes being leſs viſible; her creſt alſo is ſmaller. Buffon deſcribes the white bird as being larger than the red one, a variation which Vaillant could not diſcern; but in cabinets much difference may be obſerved in their ſize, as well as in that of all birds, from the ſtretching more or leſs of their ſkins in ſtuffing them. Some difference will appear in their colours if they are killed when their moult or change is not complete; then their appearance partakes more or leſs of red or white.

The female deſcribed by Vaillant was almoſt entirely white; yet not without a tinge of red, more evident on the tail and wings. On the contrary, the male was almoſt entirely red, but the two long tail-feathers were equally divided between red and pure white. Vaillant ſaw many of the ſpecies thus diſtinguiſhed. But the changeableneſs of the colours has cauſed much confuſion in the deſcriptions of this bird, upon which Vaillant inſiſts at great length. He ſays that it is well deſcribed by Seba, tom. i. p. 48. N° 5. except that the creſt is too large; and that Edwards has given the white variety in his N° 113. and the red one in his Gleanings, N° 325. though he places it among the birds of paradiſe, on account of the two long feathers in the tail.—Muſcicapa paradiſi, *Gmel.* Gobemouche huppé du Cap, G. blanc huppé du Cap, *Briſſon*, Pl. 41. fig. 1, 2. Moucherolle huppé à tête couleur d'acier poli, Vardiole, *Buff.* Corvus paradiſi, *Linn.* edit. x. Pied bird of paradiſe, *Edw.* and *Ray.* Gobemouche tchitrec-bé, *Vaillant*, N° 144, 145, 146.

The

The MUTABLE FLYCATCHER.—This was met with by Vaillant on the coaſt of Natal, near Caffraria; alſo in the Iſles of Bourbon and Madagaſcar; it is probable they inhabit the whole eaſtern part of the continent of Africa inclining towards the line, but not nearer to the Cape than lat. 28 or 30. Vaillant acknowledges the accuracy of Briſſon's deſcription, (ſee our Nat. Hiſt. vol. vii. p. 305.) and, as the neſting ſeaſon was paſt when he met with the birds, being able to procure neither neſt nor eggs, he adds no particulars on that head.—M. mutata, *Gmel.* Schet roux, *Vaillant*, N° 147.

The variety called the green-and-cheſnut flycatcher is made by Vaillant a ſeparate ſpecies, under the name of Schet noir, N° 148.

The CLOUDED FLYCATCHER.—Vaillant deſcribes this as a new African ſpecies; he calls it *nebuleux*, clouded, though the general plumage is as white as ſnow, except the wings and tail, which are quite black, ſo that perhaps a more appropriate name might have been ſelected. It inhabits only the Great Namaquois country, and ſeems confined to the borders of a river called by that people the Fiſh River; (which however muſt not be confounded with a river of the ſame name in Caffraria.) It haunts the foreſts of mimoſa-trees which run near that river almoſt in its whole extent. This bird is very nimble, and hard to be got, becauſe it prefers thoſe trees whoſe roots are waſhed by the river, and moſt frequently perches on the branches that overhang the water, by which means it procures an ample ſubſiſtence, as it feeds only upon little flies that frequents moiſt places. It builds alſo a neſt at the end of a branch near the water, ſo that it is dangerous to get at them; and Vaillant could procure this beautiful ſpecimen only by ſending his ſervant into the water, who ſwam towards their retreats, and ſhot them in that ſituation.

Of the clouded flycatcher the bill is longer and leſs

flatted than in the preceding ſpecies, the legs are longer; it has no creſt, yet the head is larger. The mandibles are not furniſhed with that abundance of ſtiff hairs which are ſo uſeful to the flycatchers properly ſo called for ſecuring their prey, the common flies; for this ſpecies feeds by choice upon thoſe ſmall flies or gnats which appear in vaſt quantities together, and are therefore more eaſily caught and retained than a common fly ſingly on the wing, but which the common briſtled flycatchers attain ſo dexterouſly. Vaillant therefore conſiders this and the following as belonging rather to the genus Motacilla than to that of the Muſcicapa; he ſays they might very properly follow the African warblers, under the title of "Warblers or wagtails with long tails."

This ſpecies is about the ſize of the preceding, but rather ſtouter in the body. The tail is tapered, the two middle feathers being nearly four times the length of the reſt; they are narrow at their origin, and diminiſhing in breadth to the end, where of courſe they are very thin, and have more flexibility than in the preceding, and fall into a bend with their length. The bill, feet, and nails, are black; the eyes nut-brown.

The female is ſmaller than the male; and, where he is white, ſhe is light brown, lighter ſtill on the forehead, throat, and belly; the wings and tail are black as in the male, but not of ſo deep a black. But ſhe is diſtinguiſhed, as are all the females of long-tailed birds, by wanting the two long tail-feathers. During winter the male alſo loſes his white colour and his two long feathers, and can hardly be diſtinguiſhed from the female. The neſt is generally at the end of a branch hanging over the water; it conſiſts of the tender ſtems and twigs of plants wrought in with moſs and the very thin fibres of the roots of plants. The eggs, five in number, are green dotted with brown. The male ſhares with the female the work

of

of incubation, and utters a very ſmall note, *tcherit.*—Gobemouche nébuleux, *Vaillant*, N° 149.

The BLACK-BREASTED FLYCATHER.—Black and white are the prevailing colours in this ſpecies alſo, but differently diſpoſed. The head, back of the neck, mantle, and a large patch on the breaſt, are entirely black; the throat and all the under parts of the body white; the ſcapulars, back, and wings, brown; but a large patch of white appears near the middle of each wing, formed from a part of ſome of the great ſcapular feathers, the laſt wing-feathers, and part of the outer barbs of the mid-quills; alſo a ſmall white ſpot on the rims of the three primary feathers, and another near the pinion. The lateral tail-feathers are of a fine black edged with white; they are ſomewhat tapered, but the two middle feathers exceed theſe in length by almoſt three times the length of the body; they are entirely white, and ſo extremely thin, as to be continually in motion by the leaſt breath of wind; and it is very difficult to procure a ſpecimen with theſe feathers entire, as the leaſt rubbing injures their barbs or breaks them. The bill, feet, and nails, are black; the iris brown. The bill is ſhorter, not ſo ſtrong, the feet ſhorter, and the tail leſs tapered, than in the preceding; which will be ſufficient to diſtinguiſh the two ſpecies.

The female wants the two long tail-feathers, as obſerved before; her breaſt-plate is red inſtead of black; her black in every part is leſs dark, and the white ſpot in the middle of the wing is not ſo large. The young male reſembles the female; and the adult male loſes his long feathers and black breaſt in the rainy ſeaſon, and is to be diſtinguiſhed from the female only by his ſize.

Vaillant found this ſpecies near the tropic of Capricorn in the country of Coraquois and Kabobiquois; he did not diſcover its eggs or neſt, nor the name it bears in theſe countries.—Cordon-noir, *Vaillant's African Birds*, vol. iii. N° 150.

The

The Soft-tailed Flycatcher.—Specific character, above brown, beneath ferruginous; throat (of the male) blue; tail long, wedged, with looſe webbed feathers. Bill browniſh black; head (of the male only) with a pale azure bar from the baſe of the bill over the eye; front and cheeks ferruginous; middle of the belly nearly white; feathers of the back and rump long, ſoft, ſilky; wings ſhort, browniſh-black, edged with rufous brown; body above ſtreaked with browniſh-black; tail above four inches long, the ſhafts black, ſlender, and armed each ſide with minute, ſlender, black filaments, like hair. Inhabits marſhy places of New South Wales; lives among long graſs and ruſhes, in which it hides itſelf very dextreouſly; three inches long.—Muſcicapa malachura, the ſoft-tailed fly-catcher, *Turton*, from the *Linn. Tranſ.* vol. iv. p. 240.

The Small African Flycatcher. — This pretty flycatcher is the ſmalleſt of the genus, at leaſt in Africa; it ſeems to form a connecting link between the fig-eaters and the flycatchers; the tarſus is longer than in the latter, and thus approaches the former; but the bill is more triangular and flat, and the mandibles are furniſhed with hairs like the reſt of the flycatchers. The preſent ſpecies is extremely nimble in purſuing flies and ſwarms of gnats; but in the heat of the day, when the flies are at reſt, they ſeek their prey in the trees, and feed upon moths, ſpiders, and any inſects they can find. The male is betrayed among the leaves by a little cry *zizizit*; but is not eaſily diſtinguiſhed on account of his agility and ſmall ſize, being not larger than our ſmall long-tailed titmouſe, which he reſembles in ſhape. The tail is tapered, white at the ſides, black in the middle. The firſt of the great wing-quills are black, the laſt partly white, which is the colour of the great coverts and part of the ſmall. The eye is of a fine red brown, the effect of which is heightened by a large black ſpot, which, from the corner of the mouth

mouth runs acroſs the eye quite to the ear; this black ſpot joins on one ſide to a ſtripe of white which runs over the eye; and on the other to the throat, which is white, as are all the feathers which cover the ſternum, the flanks, the belly, and under part of the tail. There is a ſmall ſtripe of red in the middle of the throat, and another under the belly; they look like blood iſſuing from a wound, and more ſo when you move back the feathers, as the under feathers are redder. The reſt of the plumage is of a bluiſh grey; the bill and toes are black, the feet brown. The female differs in the faintneſs of her colours, her inferior ſize, her tail which is ſhorter; and the red ſtripes we juſt mentioned are not at all apparent till the feathers on thoſe parts of the throat and ſternum are removed.

This ſpecies inhabits Caffraria; but more plentifully among the Great Namaquois, and eſpecially about the Great or Orange River. Vaillant had not the good fortune to meet with a neſt of this ſpecies; the ſavages informed him that they neſted in the thickets, and that their eggs were white; but he ſays he gave little credit to their teſtimony, having often been deceived by them.—Gobe-mouche mignard, *Vaillant*, N° 154.

The ORANOR.—This is a beautiful ſpecies, not African, but in many particulars like the preceding; the tail, however, is much more tapered, all the feathers differing in length except the four middle ones, which are alike and longeſt. This was ſent from Ceylon to M. Vaillant, by M. Temminck, caſhier to the Dutch India Company. Its habits and manners are not known; but, from its ſimilarity in many reſpects with the preceding, there is little doubt but its way of life is ſimilar alſo.

The oranor is larger than the ſmall African fly-catcher, being nearly the ſize of our goldfinch; but the tail is as long as the body. The head, throat, back of the neck, ſcapulars, and mantle, are black with a gloſs

The Soft-tailed Flycatcher.—Specific character, above brown, beneath ferruginous; throat (of the male) blue; tail long, wedged, with looſe webbed feathers. Bill browniſh black; head (of the male only) with a pale azure bar from the baſe of the bill over the eye; front and cheeks ferruginous; middle of the belly nearly white; feathers of the back and rump long, ſoft, ſilky; wings ſhort, browniſh-black, edged with rufous brown; body above ſtreaked with browniſh-black; tail above four inches long, the ſhafts black, ſlender, and armed each ſide with minute, ſlender, black filaments, like hair. Inhabits marſhy places of New South Wales; lives among long graſs and ruſhes, in which it hides itſelf very dextreouſly; three inches long.—Muſcicapa malachura, the ſoft-tailed fly-catcher, *Turton*, from the *Linn. Tranſ.* vol. iv. p. 240.

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The oranor is larger than the ſmall African fly-catcher, being nearly the ſize of our goldfinch; but the tail is as long as the body. The head, throat, back of the neck, ſcapulars, and mantle, are black with a gloſs

a gloſs of bluiſh grey. The four mid-quills of the tail are black; ſo are the wings, but with an orange-coloured ſpot. The lower part of the neck, breaſt, belly, and under tail-coverts, are of a beautiful red, with a few daſhes of a darker red; the rump, the lateral tail-feathers and upper coverts, are red alſo; but, as the down and under parts of theſe feathers are white, this colour ſoftens the red when the feathers are diſplaced or any way agitated. The bill, feet, and nails, are dark brown; colour of the eyes not known.

The female is about the ſize of the male; indeed it appeared rather larger; but, as Vaillant had only ſtuffed birds to judge from, it was impoſſible to tell, ſince much depends upon the preparation, and no one muſt pretend to ſpeak deciſively as to proportions unleſs he has the perfect birds before him. As for the colours, they are ſufficient to diſtinguiſh the female at firſt ſight from the male. The head, back of the neck, mantle, ſcapulars, and back, are greyiſh, inſtead of black; the forehead is white, or very faintly red; the tail is ſhorter, but tapered in the ſame manner, and the lateral feather a fainter red; the rump, and upper tail-coverts, are as bright as in the male; the ſpot on the wing is of a very faint orange; the throat, neck, and all the under parts of the body, ſtill fainter. The feet and legs are light brown; the four mid-quills of the tail are black, as in the male. After all, Vaillant cannot ſay poſitively whether this ſpecimen, which he has deſcribed as a female, may not be a young male.

This ſpecies bears ſome reſemblance to the M. ruticilla, or black-and orange flycatcher, vol. vii. 291. by Buffon called *petit noir aurore:* this laſt is much ſmaller than the oranor, and its tail is not tapered. Another bird which it greatly reſembles in colour, is the Parus Malabaricus, or Malabar titmouſe, firſt made known by Sonnerat, tom. ii. 204. but very imperfectly deſcribed and erroneouſly figured. Vaillant however inclines

inclines to think it the ſame ſpecies with the oranor. See vol. vii. 442. of this Nat. Hiſt.—Gobe-mouches oranor, *Vaillant*, N° 155.

The PURPLE-THROATED FLYCATCHER.—Vaillant places this among the chatterers. For our deſcription of it, ſee vol. vii. 317. Vaillant obſerves, that it frequents foreſts, but feeds only on fruits, and therefore cannot be a flycatcher; builds on large trees a very wide neſt, wherein the female lays four eggs. It expreſſes diſtinctly the words *pi-hau-hau*, but not with a ſharp cry as Buffon aſſerts, for it would not be poſſible to articulate *hau-hau*, which are guttural ſyllables, ſharply. The eyes are reddiſh brown; bill lead-colour; feet and nails black. The wings are large, and reach two thirds the length of the tail, the outer feather of which on each ſide is rather ſhorter than the reſt. Briſſon deſcribes the wings as reaching to the end of the tail, a miſtake which aroſe no doubt from his meeting with a ſpecimen badly prepared.

The female is ſomewhat ſmaller, and differs only in wanting the purple throat, that part being entirely black like the reſt of the plumage. The firſt plumage of the young male is the ſame; at his firſt moult he begins to have a few pale-red feathers on ſome parts of his neck; there is a ſpecimen in this ſtate in the national cabinet at Paris. The brightneſs of the throat is not complete till the third year. This ſpecies is very common throughout Guiana, and may be ſeen in almoſt every collection—Muſcicapa rubricollis, *Gmel.* Cotinga piauhau, *Vaillant's Birds of America and India*, N° 47, 48.

The CRESTED FLYCATCHER.—This ſpecies has been already deſcribed, vol. vii. 291. but, according to Vaillant, not correctly. He calls it *tchitrec*, ſo named from its cry by the coloniſts of the Cape about the river Duywenhock, where it is firſt met with. He does not object to the name given it by

Briſſon, *gobe-mouche huppé du Sénégal*, becauſe it is really met with in that part of Africa alſo. But Briſſon appears not to have ſeen the ſpecies in its moſt perfect ſtate, ſince he omits to mention the long tail which diſtinguiſhes the male, but only in the ſeaſon of love.

The tchitrec is about the ſize and ſhape of our goldfinch, but ſomewhat longer. The two middle tail-feathers of the male are extremely long at a particular ſeaſon. Beſides his long tail, the male is diſtinguiſhed by a broad, thick, fleſhy, eyelid; it is moveable, and of a fine blue colour, encircling the eye, and ſhaking about, as in ſome ſpecies of pigeons; he has alſo a beautiful tuft or creſt, the feathers of which have but narrow barbs at their origin, but ſpread out and increaſe as they riſe. This creſt is dark green, which, according as the rays of light intervene, takes ſometimes the blue gloſs of poliſhed ſteel; the ſame colour prevails over the neck, face, and breaſt, where it becomes leſs ſhining, and changes to ferruginous grey on the ſternum, and at length to white on the thighs, lower belly, and under tail-coverts. The back, wings, and tail, in ſhort the whole upper ſurface, are of a bright red; only the large wing-quills are tipped with black. The tail conſiſts of twelve feathers, of which, five on each ſide are tapering, and form exactly the ſhape of a ſpear-head: but the two middle feathers are very long, being commonly, when at the full extent of their growth, three times the length of the body. The bill is blue at its origin, black at the point; the legs and claws are bluiſh, the nails black.

The female is rather ſmaller; her creſt is not ſo large, nor her colours ſo bright. Her face, neck, breaſt, and under parts of the body, are ferruginous grey; the lower belly and under tail-coverts are of a duller white; the red on the back, wings, and tail, are not ſo ſtrong, and particularly have not

not the ſhining gloſs of thoſe parts in the male; the lid which encircles the eye is narrower, thinner, and of a paler blue. But what particularly diſtinguiſhes the female is the tail, the two middle feathers of which never, at any time of the year, extend beyond thoſe which are next to them. And it muſt be obſerved, that, after the pairing ſeaſon, the male, at his moulting, loſes his two long feathers; and, during all the rainy ſeaſon, his tail is not to be diſtinguiſhed from that of the female; his beautiful blue eyelids alſo ſink ſo as to be hardly viſible. He may ſtill however be diſtinguiſhed by his ſize, his creſt, and his plumage, which always retains a gloſs never ſeen in the female. But the male, when young, cannot be diſtinguiſhed by his exterior from the female.

This ſpecies is very plentiful along the eaſtern coaſt of Africa, from the Duywenhock to the land of Caffres; it is abundant alſo on the borders of the Sondag and Swartkop; but never near Cape-town. The male and female are rarely apart, even in the rainy ſeaſon, which may be called the winter of that country. They inhabit the woods, and prefer living in high trees, for they rarely alight upon ſhrubs or on the ground. The males are very quarrelſome; they fight almoſt as often as they meet; five or ſix will be ſometimes purſuing one another in a line; and, as their tails are very long, that is the part which commonly ſuffers; as ſoon as one catches his adverſary by the tail, he never quits him till he pulls out a feather, or at leaſt a piece of one, ſo that it is uncommon to kill a male with his tail unmutilated. Furthermore, the bird, in flying among the branches of trees in purſuit of winged inſects, is continually liable to wear or break the long feathers of the tail. In ſhort, it is ſo difficult to meet with this bird in full perfection and beauty, that, of one hundred and four males which M. Vaillant ſhot, he declares he found but fourteen uninjured.

The neſt, which Vaillant, from the teſtimony of one of his ſervants, concludes to belong to this ſpecies, is of a remarkable conſtruction, perfectly reſembling a horn ſuſpended point downwards, between the forks of a branch. It was two inches and a half wide at its greateſt diameter, which diminiſhed almoſt to a point downwards, and bending at the ſame direction. Its length, following its curvature, was eight inches, but the chord of the arc only ſix. It were hard to account for the fabrication of ſuch a neſt, ſince three parts of it ſeem entirely uſeleſs, the portion which was to contain the eggs being only three inches deep. It was formed of the filaments of the bark of ſhrubs interwoven; there was no ſoft lining, either of down, wool, or hair; the eggs were not laid, nor was the neſt complete, for the birds were at work upon it when it was taken away. It was probably intended to have been covered in, ſo as to leave a very ſmall hole at top; but this is only conjecture.—Muſcicapa criſtata, *Gmel.* Gobe-mouche tchitrec, *Vaillant's African Birds*, N° 142, 143.

The Mantled Flycatcher.—This ſpecies is of the ſize and proportions of the preceding, but it has not the long tail-feathers which Vaillant diſcovered in that ſpecies. It has a very beautiful creſt, which it raiſes at the ſame time that it ſpreads out its tapered tail in the manner of a peacock. The general reſemblance this bears to the *tchitrec* (creſted flycatcher) cauſed Vaillant once to miſtake it for that ſpecies, becauſe he firſt met with it in the rainy ſeaſon, when the *tchitrec* loſes thoſe long feathers which diſtinguiſh it; but, as he afterwards found them in other parts and in the love-ſeaſon, he was convinced that the preſent was a diſtinct ſpecies, never furniſhed with thoſe feathers; which ſhows, he ſays, how dangerous are conjectures, even the moſt probable, in natural hiſtory. On the borders of the Swartz-kop and the Sondag, he met with both ſpecies in their full livery.

The

The creſt and neck are, in the male, of a ſhining black, enriched with a beautiful ſhade of blue which comes down on the front of the neck; the mantle, rump, and upper tail-coverts, are of a bluiſh grey; a broad ſtripe of white runs acroſs the wing; of which the feathers in general are black, edged along with bluiſh grey. The tail is a little tapered, and of the ſame colour. The under plumage is in general white tinged with bluiſh grey. The bill and feet are bluiſh black; the iris brown. The mouth is briſtled, like the genuine flycatchers.

The female is ſomewhat leſs; her creſt not ſo full nor ſo dark; the hinder part of her neck, back, breaſt, and tail-coverts, are bluiſh grey; the throat and front of the neck are ſpotted with faint black upon a cinereous ground, the belly white; the wings and tail are light brown; the feet, bill, and eyes, are lighter than thoſe parts in the male.

This ſpecies was met with in the Auteniquois foreſts, and in the mimoſa woods of Caffraria. It is not ſo ſhy as ſome of the preceding ſpecies. "A pair of theſe birds," ſays Vaillant, "came habitually into my tent every day at the ſame hour, while I was encamped on the edge of a foreſt. They perched on my chair, on the edge of a trunk, or upon my table; and caught all the flies that came near them. I ſeveral times ſeized the male, but, when I let him go, he returned as uſual. The male had a ſharp cry, *ſchrret ſchrret*, which I imagine to be his call; for, when the female ſeemed unwilling to enter my tent, the male began to repeat this note, and ſhe came in preſently. I was never able to diſcover the neſt of this ſpecies."—Gobe-mouche mantelé, *Vaillant*, N° 151.

The SPECTACLED FLYCATCHER. — The eyebrows, for ſo they ſhould be called rather than ſpectacles, ſince they do not go round the eyes, are broad and white. This ſpecies haunts the great foreſts about the Gamtoo river, and has not been met with in

in any other canton of Africa; it is ſomewhat ſtouter and larger than the preceding, and not creſted. Its broad flat bill is furniſhed with very long ſtiff hairs, which denote a genuine flycatcher. Its colour would be very monotonous, but for the white eyebrows we have mentioned, ſome black on the front of the neck, and the white ſpots at the ends of the three feathers on each ſide of the tail, which is much tapered. The black or brown collar is ornamental, as it lies on the white ground of the throat and breaſt; the under parts of the body, as far as the under tail-coverts, are alſo white. All the reſt of the plumage is uniformly brown. The upper mandible is black, the under whitiſh; feet and nails light brown, eyes darker.

The female is rather ſmaller than the male; her eyebrows hardly viſible, and no appearance at all of the dark collar; the white of the under ſurface is much of a greyiſh tinge; the brown of the upper ſurface is fainter and more delicate.

This bird has the faculty of ſpreading out his tail into a fan, and laying it almoſt upon his back. His note is a ſharp cry, like ſome of the preceding ſpecies. They frequent the higheſt trees, on the tops of which they lie in wait to catch the flies that come within their reach. Their neſts they probably conceal very carefully; for Vaillant never could find one, though he was in that country about the time of their incubation. —Gobe-mouches, à lunettes, *Vaillant*, N° 152.

The Azure Flycatcher.—Upon this ſpecies (ſee vol. vii. p. 299.) Vaillant obſerves, that Buffon has improperly called it *Petit azur, ou Gobe-mouches bleu des Philippines*, becauſe there are other azure flycatchers, and becauſe it does not excluſively inhabit the Philippine Iſlands; neither ought it to be called *little*, as there are a great many ſmaller; and it is doubtful whether it inhabits the Philippines or not. Buffon's figure is alſo erroneous, as he has given the legs too great an elevation. It is ſix inches long from the

the tip of the bill to that of the tail, which is ſomewhat tapered. For the colours we may refer to our former account, as Vaillant allows that Buffon is correct in that point. He adds, that the female is ſmaller than the male, her blue fainter, and that ſhe totally wants the black cap and collar. The male and female are commonly ſeen together: they frequent the large woods on the coaſt of Natal and Caffraria; they perch on the largeſt trees, and conceal their neſt in the thickeſt branches; it is made of fibres and twigs, with an outer wall of moſs; the eggs are commonly five, of a reddiſh grey colour.—Muſcicapa cærulea, *Gmel.* Gobe-mouches azur à calotte et à collier noir, *Vaillant*, N° 153.

The BLACK-AND-WHITE FLYCATCHER.—Snowy, the feathers brown at the baſe: breaſt paliſh yellow: head, and neck, as far as the middle, wings, tips of the tail-feathers, bill, and legs, black. The female is dirty-aſh where the male is brown, and brown where the male is black. Inhabits Georgia, in ſummer; ſix inches long.—Muſcicapa melanoleuca, *Turton's Linn.*

The UNDULATED AFRICAN FLYCATCHER.—With this ſpecies Vaillant begins a ſubdiviſion of flycatchers, which, though they reſemble the only one we have in Europe, (the pied flycatcher, vol. vii. p. 288.) differ however from the flycatchers properly ſo called. The bill is not ſo broad, eſpecially at the baſe; the mouth is not furniſhed with thoſe long hairs which prevent the flies from eſcaping when once caught; and therefore, though they do hunt flies on the wing, they often loſe their prey. We have mentioned ſome of this kind already. Vaillant obſerved, that the true flycatchers live ſolitary, perching and building their neſts on the tops of large trees; but theſe, on the contrary, are more in open places, build lower, and ſeveral are often ſeen together ſeeking their food, which, beſides flies, conſiſts of caterpillars, the eggs and larvæ of butterflies, and ſuch little

tle

tle inſects as are found on the branches and leaves of trees. They are alſo of a ſhorter and ſtouter make, with a ſhorter tail, little or not at all tapering; and their motions are not ſo briſk. Their ſong is alſo more harmonious, though not by any means to compare with the warblers.

Vaillant therefore concludes, that we have not in Europe one ſpecies of flycatcher properly ſo called; but that thoſe now to be treated of agree with the two European ſpecies that come neareſt to them.

"The preſent African ſpecies," ſays Vaillant, "ſo much reſembles the flycatcher common in France, that they might eaſily be confounded; and, when firſt I ſhot it in Africa, I was almoſt perſuaded they were the ſame. Not being able to compare them, I was the more eaſily deceived, as the colours are ſimilar, and eſpecially as I had found many other African birds exactly ſimilar to the ſpecies in Europe. I however obſerved that my African bird was ſmaller; and I thought it ſtrange the ſpecies ſhould degenerate in a warm climate, in a country where inſects are ſo abundant, that it might on the contrary have been expected to be larger; it was not, however, till I had brought ſeveral of them, both males and females, to Europe, and had compared them with our flycatchers, that I was ſatisfied they were two diſtinct ſpecies. This may ſerve as a hint of caution to other naturaliſts."

This bird, then, is ſmaller than the European ſpecies it ſo much reſembles, being only four inches and ſix or ſeven lines from the end of the bill to the tip of the tail, whereas the other ſpecies is five inches eight or ten lines in length; and the ſame proportions nearly ſubſiſt in the other parts; the bill indeed is broader at the baſe, and the wings are but two inches long, while thoſe of the European flycatcher are two inches two lines, and their coverts reach beyond the middle of the tail, but in the African ſpecies not more than a fourth part. But we have ſtill more decided ſpecific differences.

differences. The tail of the European flycatcher is ſomewhat forked, the mid-quills being ſhorteſt; in the African they are the longeſt. The African ſpecies has but fourteen feathers in each wing; the European ſeventeen; the former has two baſtard feathers, the latter but one. From theſe indelible marks, which climate cannot alter, we may conclude theſe two birds, notwithſtanding their general reſemblance, to be different ſpecies.

The bill, feet, and nails, are entirely black; the top of the head, back of the neck, mantle, wings, and tail, are of an uniform blackiſh brown, darker on the large feathers of the wings and tail. Thus the preſent ſpecies has not thoſe ſtreaks of white on the forehead which appear on thoſe of Europe, nor thoſe daſhes of red on the wing-coverts; yet the laſt wing-feathers have a ſlight edging of rufous. The throat is white with brown undulations; breaſt of the ſame, with larger ſpots, but not well defined; neck and belly white; the plumage of the thighs rufous grey; the eyes brown.

The female is ſmaller; her colours more delicate; her breaſt whiter, the brown not extending ſo far; in other reſpects they are exactly alike. From this account the naturaliſt may judge of the reſemblances and the differences between this and the European ſpecies.

Inhabits in great numbers the Auteniquois country, and the whole coaſt of Natal. The male expreſſes very clearly *tzirer-chreſt;* the female has but a ſingle note. They build their neſts in coppices and thickets in a forked part near the trunk; they are compoſed of bits of herbs and hair, with an outer covering of moſs and a lining of hair. The female lays five eggs of a reddiſh-grey colour. The young birds at their firſt plumage have the wing-feathers all edged with red; and all the brown colour has a ſmall tinge of red, eſpecially about the rump.—But Vaillant met with an

entire brood, the young of which had the wing and tail feathers almoſt wholly white; a proof that it is not in cold countries only that birds vary to a white colour. —Gobe-mouches ondulé, *Vaillant*, N° 156.

The STARRED FLYCATCHER.—The ſpecific character is, a little white ſtar on each ſide of the forehead between the upper mandible and the eye. The head is entirely covered with bluiſh grey, except the white ſpot. The throat is of the ſame colour, terminating in a white collar formed by a ſingle row of feathers. The mantle, back, rump, and upper tail-coverts, are olive-green with a tinge of yellow; the feathers of the tail are equal in length, and of the ſame colour, but the lateral ones are inwardly barbed with yellow. The wings are ſlate-colour, with an edging of lighter grey. All the under parts of the body and tail are yellow, inclining to olive on the breaſt and ſides. The bill and claws are blackiſh brown; the legs yellowiſh brown; the eyes browniſh red.

This ſpecies is ſomewhat larger than the preceding, being very near the ſize of our flycatcher, but the legs are longer. The female is as large as the male; her head, neck, mantle, wings, and tail, olive-green, but duller than in the male; the throat and cheeks fainter olive; and the under ſurface pale yellow with a tinge of olive on the breaſt and under the tail. She has neither the grey head-piece, the white ſtars, nor the white collar, of the male. In the young birds, the male and female can hardly be diſtinguiſhed. The male, at the ſecond moult, receives his grey head-piece; but ſtill the white ſtars in the forehead cannot be perceived but by removing the feathers at the place they ſpring from; and the white necklace is not yet formed. He does not attain his complete plumage till a year old.

The ſong has ſome reſemblance to that of our chaffinch. They build in trees, in the low forked branches; the neſt is made of fibres of herbs interwoven

woven with a ſpecies of lichen very common on the trees of that country; the lining is very minute and flexible bits of roots, but contains nothing like down, feathers, or hair. The eggs are four, greeniſh-grey dotted with red; incubation laſts ſixteen days.

One ſingularity was obſerved in theſe birds: on each ſide the vent, the male has two fatty protuberances, ſhaped exactly like eggs, three lines long and two thick, and of a white colour. "Their ſhape and colour," ſays Vaillant, "made me at firſt ſuppoſe they might be external teſticles; but, having opened the bird, and found he had internal ones like all other birds, I found I had been deceived. I cut them in two, and found them to contain a yellowiſh oil, exactly ſimilar to what is expreſſed from the glands about the rump in all birds, and which ſerves to poliſh their feathers. I found, however, that the liquor did not ooze out upon ſqueezing theſe glands, or eggs, unleſs ſo ſqueezed as to burſt them: I therefore imagine them not to be intended for that purpoſe. The next idea was, that this appearance might proceed from ſome diſorder; but this I could not long entertain, becauſe ſeven males whom I had killed had all of them theſe protuberances, and I never met with them upon any female; neither did any of the males I killed appear to be diſeaſed. I have never been able to clear up my doubts on this head, as to whether it were a diſorder peculiar to this bird in certain cantons or at a particular ſeaſon; for I never met with the ſpecies but near Blettemberg or Lagoa Bay, and towards Poort."— Gobe-mouches etoilé, *Vaillant*, N° 157.

The BLUE-AND-RED FLYCATCHER. — Specific character, upper ſurface bright blue, under orange-red. This ſpecies inhabits the country of the Great Namaquois, on the trees near the Fiſh River. It is ſix lines ſhorter than the preceding. Almoſt the whole upper ſurface, namely, the face, head, back of

the neck, mantle, rump, wings, and tail, is of the brighteſt azure-blue; the throat, front of the neck, and breaſt, orange-colour; and the belly, legs, and under tail-coverts, white. The bill, feet, and nails, are brown; eye bright orange. The female is ſmaller; her blue is not ſo bright; and her under ſurface is entirely white, with ſome very faint tinges of red; belly a dirty white. In Vaillant's coloured plate of this ſpecies, the colours intended for the male are laid on the female, and vice-verſa. See his African Birds, Pl. 158. The young male has orange only on the lower part of the throat, with a few traces of that colour on the breaſt. Vaillant was informed that theſe are birds of paſſage, arriving in that country during the heats, and migrating in the rainy ſeaſon. The call of the male very diſtinctly expreſſes the ſyllables *piet-piet-piereret, piereret.* Theſe birds are not very ſhy: they feed upon caterpillars and ſpiders only. They make their neſt in mimoſa-trees, fixing it ſtrongly in the fork of two or more branches; it conſiſts of twigs nicely interlaced, and is very deep, but no down of any kind, neither feathers, hair, nor even moſs, enters into its compoſition. The eggs, five or ſix in number, are olive-green dotted with red, eſpecially towards the larger end, where they are ſo numerous as to form a kind of chain-work.—Gobe-mouches azurou, *Vaillant*, N° 158.

The White-hooded Flycatcher.—The head and neck are entirely encloſed in a hood of white, which falls down in a point upon the black of all the front of the body as far as the under tail-coverts, which again are fringed with white. The plumage at the top of the head is long, and forms a creſt inclining backwards, but which the bird erects when moved by anger or by love, emitting at the ſame time a plaintive note, which dies away in a ſingular manner. The hind part of the neck, mantle, back, wings, and tail, are jet black; but all the wing-quills are edged with white, which has a very pretty effect. The tail, which is a little rounded,

rounded, is tipped with white. The bill is brown, the eyes red, the feet and nails black. The female is as large as the male; her hood is grey inſtead of white, and the creſt very ſcanty. The reſt of her plumage is black of a browniſh caſt, and the edging of the wings is grey.

This ſpecies Vaillant met with only on the high mountains in the country of the Houzouanas, and among rocks. They are extremely ſhy, and our naturaliſt was never able to diſcover a neſt. In the ſtomachs of thoſe he ſhot he found the remains of inſects only.—Gobe-mouches à capuchon blanc, *Vaillant*, N° 159.

The MILLER FLYCATCHER. — This ſpecies is called *moolenar*, miller, by the Dutch ſettlers and Hottentots, becauſe the male really makes a noiſe reſembling thoſe hand-mills which many of the inhabitants uſe for grinding their own corn. Theſe birds keep in the thickeſt buſhes, and would not be eaſily diſcovered but for the grating note of the males, *grerrrrar*, *grerrrrar*, which they repeat almoſt inceſſantly; yet they are not very ſhy, for, while making this delightful muſic, you may get near enough to knock them down with a ſtick.

The male is about the ſize of our titmouſe, Parus major. It is of a reddiſh brown tinged with olive on the head, neck, mantle, rump, and upper tail-coverts; the wings are black, and ſo is the tail, but the lateral feathers are bordered with white; the feathers of the wings alſo have a edging of reddiſh white; and near the middle of the wing appears a ſpot of red. A black ſpot begins at the noſtrils, and reaches acroſs the eye. The throat is black, which is divided from the black of the eye by a white ſtripe. There is a large black patch on the breaſt, leaving on the front of the neck another white ſpace dividing it from the black of the throat. The ſides are ruſt-colour; the reſt of the under part pure white. The bill and feet are brown; the eyes very bright orange.

The

The female is rather ſmaller than the male. Her throat and breaſt are ferruginous red inſtead of black; belly the ſame. The male and female are commonly ſeen together; and chiefly in thickets or buſhes, not in woods, though woods abound in the canton through which runs the river Duywenhock, where Vaillant firſt met with them; and he continued to ſee them all the way as far as the country of the Auteniquois, where he never met with one. M. Vaillant was not however ſo fortunate as to find either neſt or eggs, the pairing-ſeaſon not being arrived when he was in that quarter. One of the natives informed him that they built in thickets, which is very probable; and that their eggs were white, and ſix in number. They feed on caterpillars and inſects.—Gobe-mouche môlenar, *Vaillant*, N° 160.

The Pririt Flycatcher.—The name is taken from the note or cry uttered by the male. This ſpecies is common to both the eaſt and weſt coaſts of Africa; on one ſide, about the great Fiſh River and throughout Caffraria; on the other, among the Great Namaquois, and eſpecially in the mimoſa-woods which ſkirt the Great River on both ſides; but more abundant on the eaſt.

This bird is about the ſize of the preceding; and the male is alſo diſtinguiſhed by a large black breaſt-plate. The throat and front of the neck are entirely white, which reaches far back like a collar. All the under parts of the body, including the under tail-coverts, are alſo white, but with ſome black on thoſe parts of the ſides which are concealed by the wing. The top of the head is dark bluiſh-grey; along the forehead runs a white line, which goes over the eye like an eyebrow; from the corner of the mouth on each ſide runs a black ſpot, which going acroſs the eyes, widens over the ears, and runs to the back of the neck, where the two are ſeparated by a white ſpot. The mantle is ſlate-colour, inclining to black on the ſcapulars,

ſcapulars, the wing-coverts, the back, and upper tail-coverts; ſome irregular black lines, like pencil-marks, appear on the rump. The tail, which is a little rounded, is black, the two lateral feathers edged with white, the others tipped with white; the wing-quills are black, edged with white, the white edging increaſing in breadth from the firſt quills to the laſt; a white feſtoon fringes the end of the great coverts, forming a white ſpot acroſs the wing. The bill, feet, and nails, are horn-colour; the eyes pale yellow.

The female is rather ſmaller than the male. The throat and breaſt are faint red, much lighter on the ſides of the throat and middle of the neck, ſo that the red of the breaſt and the ſpot on the throat are encloſed as it were in a yellowiſh frame. The front and top of the head are grey, as in the male; ſhe has alſo a black ſpot from the corner of the mouth acroſs the eyes; but it does not extend ſo far, and is terminated by the black line which encloſes the grey of the top of the head. She has alſo a kind of white eyebrow like the male. The top of the mantle is light red ſhaded with brown, and the lower part of the ſame is black mixed with white. The rump is mottled white and black, but the white is prevalent. The under part of the body is white, in ſome parts inclining to grey; the tail is black, tipped with white; wings the ſame.

The neſt Vaillant was not able to procure; he could only diſcover, therefore, that they feed on inſects, caterpillars, and ſpiders; that the male is generally accompanied by his female, the male emitting one uniform note, *pririt, pririt;* and, laſtly, that they are more ſhy than the preceding ſpecies, and more nimble alſo; ſo that to procure them was no eaſy matter, though very plentiful.—Gobe-mouches pririt, *Vaillant*, N° 161.

As a concluding remark upon this genus, Vaillant obſerves, that the birds of different genera in Africa, which feed entirely upon inſects, are extremely numerous

rous indeed in compariſon with thoſe in Europe; witneſs the preſent genus of flycatchers, the ſpecies of which are found from the entrance of the Cape of Good Hope quite to the tropic. He aſſerts that we have in Europe but twenty-ſix birds that live entirely upon inſects, among which he reckons four ſpecies of the Lanius or butcher-bird, two of the Muſcicapa or flycatcher, one Sitta or nuthatch, four of the Tetrao or partridge kind, two of the Certhia or creeper, one Promerops or hoopoe, five of the Hirundo or ſwallow, one Caprimulgus or goatſucker, &c. But in Africa there are not only many more of each of theſe genera, (as perhaps of flycatchers alone more than forty,) but alſo many others, which, though they feed entirely upon inſects, cannot, he ſays, be reduced to any of the genera we have. But, as this ingenious and diligent traveller is ſatisfied with plentifully abuſing our ſyſtems without ſubſtituting any of his own; ſince he "oppoſes every thing, and propoſes nothing;" all that we can do, conſiſtently with our own plan, is to place his new ſpecies in thoſe genera they ſeem moſt nearly allied to.

The Drongo.—This bird is the firſt of a ſeries which Vaillant has collected into a new genus, which he calls *drongo*, from the name of this ſpecies at Madagaſcar. His general remarks upon this new genus (in which he ſays ſhould be included ſeveral ſpecies of the Lanius, Corvus, and Muſcicapa) are as follow: The drongos have more ſtrength in their jaws than moſt of the butcher-birds; they have ſtiff hairs at the gape like the flycatchers; they have a notch in the upper mandible, but not ſo large as in the butcher-bird; the noſtrils are very large, and entirely covered with briſtly feathers, as in the Corvi; the legs are ſhort and ſtrong, nails large and hooked; the hind toe is the largeſt; it is broad and flat, as well as the baſe of the other three. Some of the ſpecies are very large; but all have the tail forked, at leaſt as long as the

the body, and conſiſting of ten quills. As theſe birds feed upon inſects, and chiefly upon bees, we have thought beſt, for reaſons before aſſigned, to place them here.

The preſent ſpecies, then, as Vaillant aſſerts, has been deſcribed and figured by Briſſon under the name of the Great-creſted flycatcher of Madagaſcar; but Buffon, he ſays, placed it at the end of the butcher-birds.

It is common in Caffraria; frequenting the large foreſts, and aſſembling in ſmall companies. Its chief nouriſhment is bees, which it catches on the wing as the other flycatchers do the common flies, &c. But it is chiefly in the evening after ſunſet, and in the morning before ſunriſe, that the drongo hunts theſe induſtrious inſects; ſmall companies of them range themſelves along the wood, perched on ſolitary trees either withered or having many leafleſs branches, the better to ſeize the moment when the bees depart from the wood, or return with their booty. Sometimes as many as thirty may be ſeen together in motion upon the ſame tree, ſome flying off, others returning, forming a very buſy ſcene, and by no means a quiet one; each inceſſantly repeats a cry which may be expreſſed by *pia-griach*, *griach*. From the cry of theſe birds, while thus employed after ſunſet, and their being of a black colour, the coloniſts at the Cape call them *duywels voogel*, devil-birds; and Vaillant ſays his Hottentots always conſidered them as birds of ill-omen, and entreated him not to ſhoot at them, and eſpecially when they were thus collected and performing their magic rites as they thought, leſt ſome misfortune ſhould befal the company. But Vaillant explained to them the nature of the employment of theſe birds, after he had made himſelf fully acquainted with it. When the night ſets in, the nocturnal birds of prey drive theſe bee-eaters to their retreats.

The drongo has a creſt ſtanding upright upon the

forehead; the feathers are narrow and ſtiff, ſo as never to lie flat upon the head; but are inclined forward: the front feathers are but a few lines in length, but the hinder ones two inches. Size nearly of the thruſh; plumage entirely black, with a green tint in certain poſitions; the eyes are dark brown. The wings when extended are fifteen inches from tip to tip; yet when at reſt they reach but one third the length of the tail. The tail conſiſts of ten feathers, the lateral ones two inches longer than the intermediate ones, ſo that it is much forked.

The female is rather ſmaller than the male, and her creſt about half the height; in other reſpects there is no difference. The young bird is of a brown black on the wings and tail; the reſt of the plumage black mixed with grey, but under the tail with white; the creſt is then but eight or ten lines high in the male, but in the female not yet viſible. Its habits and neſting are not abſolutely known, but are ſuppoſed to be the ſame with thoſe of the following, which Vaillant had the good fortune to meet with in the ſeaſon of incubation.—Grand gobe-mouches huppé de Madagaſcar, *Briſſon*, ii. 338. Drongo, *Vaillant's African Birds*, N° 166. *Buffon*, N° 189.

The Small Drongo.—This ſpecies is ſmaller than the preceding, and has no tuft; the tail is leſs forked, the lateral quills being but eight or ten lines longer than the intermediate ones. In manners it reſembles the former. It is met with along the eaſtern coaſt of Africa, from the ſmiling banks of the river Dwywen-hock to the bay of Formoſa or Blettenberg; it occurs again by the Small and Great Fiſh Rivers at the entrance of Caffraria, and in the mimoſa-woods of the Gamtoos, the Swarte-kop, and the Sondag; but not in the interior, nor on the weſt coaſt.

This bird is of a black colour, browniſh at the ends of the great wing-quills, and bluiſh on the parts directly expoſed to the light; the eye dull brown. The female

female is rather leſs than the male. The young bird has ſome white on the lower belly, and on the under tail-coverts; and the plumage in general is gloſſed over with browniſh grey.

In the love ſeaſon, the male has a ſong morning and evening ſomewhat like our blackbird. The neſt is fabricated in the forked extremities of the lateral branches of the higheſt mimoſa-trees; it conſiſts of flexible twigs interwoven ſo looſely and diſtantly, that from the bottom of the tree you may ſee and count the eggs within, for there is no downy matter whatever to fill up the interſtices. The eggs are generally four in number, white with black ſpots. The male ſhares with the female the cares of incubation.—Drongear, *Vaillant*, N° 167, 168.

The WHISKERED DRONGO.—This is larger than the two preceding, being about the ſize of the common thruſh. The ſpecific character is, a bunch of ſtiff hairs riſing erect from each noſtril, and joined by ſimilar hairs from each ſide the lower mandible bending forward, and forming very evident whiſkers.

This bird is more ſquat than the other drongos; its tail is not ſo deeply forked as that of the drongo, but more ſo than that of the ſmall drongo. The wings and tail are browniſh dirty black; the reſt of the plumage black with a greeniſh gloſs. The bill and feet black; the eye bright maroon-colour.—The female is about one fourth leſs than the male; her plumage differs only in ſome white ſpots on the lower belly and under tail-coverts; her whiſkers alſo are much leſs.

Vaillant met with this ſpecies but once, in a foreſt in Caffraria near an encampment which he called the Field of Death. He and his man ſhot five at that time, two males and three females; in their ſtomachs he found the remains only of bees and caterpillars. Their cry is *ghi-err-gret*, which thoſe that eſcaped uttered all at once when the gun went off. Remaining

but a ſhort time in that quarter, Vaillant was not able to diſcover any more of their habits, or their mode of incubation.—Drongo mouſtache, *Vaillant*, N° 168.

The GREY DRONGO.—This ſpecies inhabits Ceylon, whence Vaillant received thirteen of them, all dried, but not diſbowelled; he found the internal parts, therefore, very perfect, and could eaſily diſtinguiſh the males from the females. The ſtomach contained nothing but the remains of bees and other inſects. This bird greatly reſembles the ſmall drongo; the tail is rather more forked, as in the drongo. The bill, feet, and legs, are lead-colour; the plumage in general of a ſhining ſilver grey; the colour of the eyes could not be diſcovered. The females were rather leſs than the males.—Drongri, *Vaillant*, N° 170.

The WHITE-BELLIED GREY DRONGO.—This ſo much reſembles the laſt, that it might be taken for a variety. The top of the head, neck, back, in ſhort all the upper ſurface, are of the ſame ſilvery grey; but the whole of the under ſurface, i. e. the throat, breaſt, belly, thighs, and under tail-coverts, beautiful white; the bill, feet, and nails, lead-colour. Many young birds have the under parts of the plumage entirely white; it therefore remains a doubt whether this may not be a young bird of the preceding ſpecies. Vaillant, who examined two ſent from Batavia, did not however ſee any reaſon to ſuppoſe them to have attained their firſt plumage only; they had every appearance of being full-grown birds. They might indeed be females of the preceding, as they differ from the male in colour till they are more than two years old.—Drongri à ventre blanc, *Vaillant*, N° 171.

The LONG-TAILED DRONGO.—This ſpecies is longer and thinner than the reſt of the drongos; the bill is very long, and weaker alſo in proportion; and the tail is longer than the whole body from the point of the bill to the vent; it is conſiderably tapered, the lateral quills being at leaſt two inches and a quarter longer

longer than the intermediate ones, forming a deeper fork than any of the ſpecies we have called *drongos*. The plumage in general is black, with a bright blue gloſs; bill, feet, and nails, lead-colour.—Drongalon, *Vaillant*, N° 174.

The RACKET DRONGO.—This is a very large ſpecies. It has been very erroneouſly deſcribed by Sonnerat. The outer lateral tail-feathers extend in naked filaments for ſix or ſeven inches beyond the intermediate feather, but are furniſhed with barbs at their tips, which ſpread out broad like a racket or battledore; yet theſe barbs are confined to the outer ſide of the ſtem, the inner part being naked. This bird is entirely of a gloſſy black, with reflections of green in certain lights. Inhabits Batavia and Malabar. Some ſpecimens which wanted the two long feathers were ſaid to be females; they differed in no other reſpect. Sonnerat tells us nothing of the habits of this ſpecies; he deſcribes the tail as ſquare, inſtead of forked; the eyes, he ſays, are red.—Grand gobe-mouches de la côte du Malabar, *Sonn. Voy. aux Indes*, tom. ii. pl. 3. Drongo à raquette, *Vaillant*, N° 175. In another place, Vaillant affirms this to be the ſame with the Cuculus paradiſea of *Linn.* for which ſee vol. iv. p. 483, of this work.

The BRONZED DRONGO.—This ſpecies, whoſe plumage, though entirely black, is of a brilliant kind, inhabits Bengal. It is preciſely of the ſhape and ſize of the *drongear*, or ſmall drongo, and might be taken for a variety. All the upper ſurface, then, is of a gloſſy black, melting into blue or bronzed green, which gives it a wonderful brilliancy when expoſed to the rays of light. The under ſurface is dark grey without any gloſs; the under parts of the wing and tail-quills is abſolutely black; ſo are the bill and feet.—Drongo bronzé, *Vaillant's African Birds*, N° 176.

MOTACILLA,

MOTACILLA, THE WAGTAILS, WARBLERS, &c.

The CORYPHÆUS, or AFRICAN NIGHTINGALE.—This ſpecies is ſo named by Vaillant as being qualified to diſpute the palm of melody with the nightingale of Europe, which moreover it much reſembles in ſhape, ſize, and graceful motions. Its mode of ſinging is not ſo ſhrill and ſo varied; but it is more equally continued, conſequently more mellow and affecting. The expreſſion of the European coryphæus is more lively and animated; that of Africa more tender and voluptuous: the ſong of the former ſpeaks more perhaps to the ear, of the latter to the heart. In ſhort, the nightingale is a maſter, who by the efforts of art, execution of voice, and the difficulty of the ſong, ſeems to force applauſe; while the coryphæus, by the ſimplicity and mild harmony of his notes, appears only to awaken ſenſibility; in a word, the one expreſſes enjoyment, the other the mild ſentiment which leads to it.

Like the common nightingale, the male only of this ſpecies is endowed with a delightful voice, and the ſeaſon of love is the only time they ſing, beginning an hour or two before the riſing and ſetting of the ſun. When the weather is calm and ſerene, their ſong continues the greateſt part of the night; and after a mild rain, when the ſky is cloudy but not ſtormy, they may be heard all day.

Nature, in beſtowing upon this bird a faſcinating voice, has denied it brilliancy of colour. Nothing can be more plain and ſimple than its plumage, which is the ſame in all ſeaſons; but at the ſame time its ſhape is elegant, and its motions graceful. Its large brown eyes and white eyebrows, ſhaded by a ſpot between them and the noſtrils, form an agreeable and lively phyſiognomy. The upper ſurface of the body and tail are of a dull brown; the lateral tail-quills are brown-

grey

grey at their origin, blackiſh farther on and within, and white at the tips; the front of the neck is blue-grey, with a patch of white on the throat; the reſt of the under ſurface, i. e. the breaſt, flanks, thighs, and under tail-coverts, is reddiſh-brown. The bill, legs, feet, and nails, are blackiſh; tail tapering. The female is ſomewhat ſmaller than the male; her upper plumage is lighter; the under parts are entirely of that blue-grey which in the male appears only on the neck: in other reſpects they are perfectly ſimilar.

They pair in October; and at that time the male is in full ſong. In November they ſeek out a retired and ſecure place, at the foot of a thick buſh; there they make their neſt of graſs and moſs, ſecured and lined with hair. As ſoon as the neſt is finiſhed, the female lays an egg each day till they amount to five at the moſt, or three at the leaſt; they are of a pale greeniſh-blue, but inclining to greeniſh-brown at the large end. In ſome of the neſts, Vaillant obſerved the egg of the creſted cuckoo had been dropped; this egg was entirely white, and twice the ſize of the nightingale's egg. While the female ſits, the male perches on a neighbouring tree, or on a buſh, and ſings for hours together; we do not ſay for the purpoſe of amuſing his female during the tedium of ſitting; for it is probable that her employment is complete enjoyment; and indeed nothing is more arbitrary and unfounded than the inclinations and intentions we attribute to the actions of animals. What would prove the contrary in this caſe is, that, if one of theſe birds be deprived of his female, he ſings notwithſtanding, and even for a longer time; while, on the other hand, when the young ones demand his care, he leaves off ſinging, or at leaſt ſings but ſeldom; and his notes at that time are not ſo agreeable.

The African nightingale has the ſame attitudes and geſtures with the European ſort, and that ſtrange kind of curioſity which draws him towards mankind. He has

has alſo thoſe motions of the tail which are underſtood by the generic term *motacilla*. The coryphæus feeds on inſects, worms, ant-eggs, and all ſorts of berries. It inhabits the mimoſa-woods from the Camdeboo to the river Sondag and Swart-kop; their ſong enlivens this wild barren land, when the cool evening ſucceeds the heat of the burning ſun. Vaillant ſays they were attracted in great numbers by the fire he lighted up in the night. He took a complete neſt, but was not ſucceſsful in rearing them; yet he thinks they might be preſerved if treated in the manner our bird-fanciers uſe in rearing nightingales and linnets; and their ſong would well repay the pains.—Coryphée, *Vaillant's African Birds*, N° 120.

The LONG-TAILED AFRICAN WARBLER.—This, like the M. longicauda, vol. vii. p. 394, is diſtinguiſhed from the European warblers by a long tapering tail. It inhabits the country of the Namaquois from Black-ſpine River till under the tropic; but not on this ſide; thus it is met with only in a certain ſpace, along the weſt coaſt. They live in ſociety, feeding on worms, ſpiders, and other kinds of inſects. At the end of the rainy ſeaſon, theſe little flocks ſeparate, and pair; and during the ſeaſon of love one male and one female only are found together. The neſt is made of the down of plants; it is of an oval ſhape, and is entirely cloſed, except a little hole about two thirds of its height, which ſerves for an entrance; it is admirably conſtructed, and ſecurely faſtened in the middle of a ſhrub of moderate height. The eggs are five or ſix in number, of a reddiſh-white ſpotted with brown.

This ſpecies is ſomething leſs than our M. curruca, or babbler; but of a more lengthened form, the tail being as long as the whole body. In the male, the top of the head, the back part of the neck, the mantle, ſcapularies, wings, and tail, are light brown, tinged with yellow or dun colour; the throat and front of the neck are whitiſh; and lower down, on each ſide the

the breaſt, are two brown ſpots, with ſome ſmaller ones, but too faint, and not ſufficiently regular, to deſerve the name of a collar; the reſt of the under plumage is faint yellow, inclining to white under the tail; the legs and feet are yellowiſh, the bill brown, the eyes red. The female is rather ſmaller than the male, and has no ſpots on the breaſt; the dun-colour is redder, the yellow much fainter.—Citrin, *Vaillant*, N° 127.

The BLACK-BREASTED PETTYCHAPS.—This ſpecies has a black collar, or rather a broad ſemilunar ſtripe, which goes entirely round the lower front of the neck, above which the neck is of a moſt delicate white. The upper ſurface is entirely of a greyiſh green, or olive-colour; the wing-quills are blackiſh bordered with olive; ſo are the middle tail-quills; the lateral ones are partly white, ſo that the under part of the tail appears quite white. All the under ſurface of the body is yellowiſh white. A black patch covers the upper part of the cheek, at the extremity of which patch lies the eye, which is brown; the bill is black, legs and feet yellowiſh. The male is about the ſize of the ſmaller pettychaps of Europe, (vol. vii. p. 339.) The female is ſomewhat leſs; ſhe has no collar, nor does the male aſſume this diſtinction till his ſecond moult. The male and female are always found together. The warble of the male is very agreeable, eſpecially in the warm ſeaſon. They begin to pair in November, and their eggs are found at the beginning of December. They build their neſts in thickets, or among herbs and humble plants; the eggs, uſually ſix, are reddiſh white.

This bird, like the European pettychaps, is one of thoſe to whom the cuckoo confides the care of bringing up her young. Near the end of December, Vaillant found a young cuckoo, as big as a blackbird, in one of theſe neſts; it filled up the whole neſt, nay, it had even ſtretched and ſpoiled the ſhape of it. I was ſurpriſed, ſays that curious obſerver, to ſee with what

attention thoſe little birds fed this enormous glutton, whoſe head was always out of the neſt, his mouth wide open, and ever craving. Six days after I firſt ſaw it, it took flight, having quite broken the neſt to pieces to get out; the cuckow fixed its abode upon a mimoſa-tree, where its foſter father and mother went regularly to feed it. The black-breaſt is common from the Elephant River to the tropic; rare towards the Cape; but more plentiful from lat. 28. to the tropic, eſpecially on the borders of the Great or Orange River; found alſo in Caffraria, but not common.—Plaſtron noir, *Vaillant's African Birds*, N° 123.

The RED-HEADED PETTYCHAPS.—This has the manners of the preceding, inhabiting and neſting among low ſhrubs and plants. The neſt is conſtructed of hairy ſtalks and moſs, and a warm lining of the ſame kind of hair and feathers. Eggs from four to ſix, white, with very ſmall vinous ſpots. Inhabits the Camdeboo country; more rarely among the Caffres and Namaquois. It is about the ſize of the babbler, vol. vii. p. 342. The top of the head is of a red-brown or tan-colour; the tail is ſquare, or ſtraight, and the wings hardly cover the rump. The upper ſurface of the body is browniſh grey; the under parts cinereous, whiter on the belly. The eyes are red-brown; legs and feet yellowiſh. The female is rather ſmaller; but has not the head redder than the reſt of the body.—Rouſſe-tête, Fauvette rouſſe-tête, *Vaillant*, N° 124.

The OLIVE-GREEN PETTYCHAPS.—Length of the male four inches and one eighth, of the female four inches. Vaillant met with a ſingle pair of this ſpecies when encamped at Pampoen-kraal, in his voyage through Africa. The male, he ſays, came night and morning, and cheered his ſolitude with a moſt melodious ſong, perching on the top of the hut, not at all daunted at the ſight of the people. The female was equally familiar, hopping in every corner of the hut,

about

about the tents, and among the cattle, in ſearch of food. His ſong was the more grateful to our traveller, as the rainy ſeaſon was begun, and no other bird was heard in the country. Vaillant, however, took the liberty to ſhoot this kind muſician and his lady, and carried them off when he moved his tents, very unwillingly, as he ſays; but, as he could find no more of that ſpecies in the neighbourhood, he would not leave his collection incomplete.

The tail is very ſhort, and the wings reach almoſt to the end of it; ſo that the ſpecies is diſtinguiſhed by a ſhort and ſtunted make. All the upper ſurface is of a beautiful yellowiſh-green. The under part of the tail is whitiſh; and the inner parts of the wing-quills are light black. All the under parts are white; the eyes are light brown; bill greyiſh; legs and feet pale yellow. In the female, the green colour is more ſlightly ſhaded with yellow: and the white of the under parts is not ſo pure, but takes an olive tint. It is probably a bird of paſſage in the Auteniquois country, where Vaillant met with it, ſo that nothing is known of its neſting or incubation. This pair were probably ſtragglers, who had arrived too ſoon, or were left behind; for we find in our own country a few individuals who remain after their companions are gone, and who even ſpend the whole winter with us.—Olivert, Fauvette olivert, *Vaillant's African Birds*, N° 125.

The GREY PETTICHAPS.—This ſpecies is very numerous on the borders of the river Gaus, Goud, (Gold,) or Gaurits; and thence to the *Brake Rivier*, or River Saumatre, but not beyond.

Theſe birds live in ſociety; they are very briſk, and full of motion; little flocks, from eight to twelve in number, are met with continually on the mimoſa-trees, running along the branches inceſſantly, ſeeking for inſects, and the larvæ and eggs of butterflies, in

the chinks of the bark and under the leaves; theſe are their chief food. While thus foraging, they emit a faint warble, which might eaſily be miſtaken for that of the long-tailed titmouſe when hopping from tree to tree. Vaillant does not deſcribe their neſt, or manner of incubation, not having been in that part of the country in the pairing ſeaſon: but he ſuppoſes the ſmall flocks he met with to have been each one complete family. Hence it appears probable that each female lays eight or ten eggs, or perhaps more.

The bill and legs of this ſpecies are blackiſh. The whole upper ſurface of the body, with the great and ſmall wing-coverts, and the outer barbs of their quills, are ſlate-colour. The throat is prettily ſpotted with black on a cinereous ground; the under parts of the body are moſtly cinereous; but the lower belly and under tail-coverts are dark red. The lateral tail-quills are moſtly white outwardly; the mid-quills are black, as are the interior barbs of the wing-quills. The eyes are greeniſh grey. The female is exactly ſimilar to the male in colour; but, contrary to the ordinary rule in birds of this genus, ſhe is nearly one-fourth larger.

Vaillant has alſo the figure of a variety of the ſame, with the greateſt part of the plumage, eſpecially the wings and tail, entirely white; but the lower belly and vent red.—Grignet, *Vaillant*, N° 126.

The Wood Wren.—Specific character, above olive-green; throat and cheeks yellow; belly and vent fine ſilvery; tail-feathers brown, and, except the firſt, green on the outer webs, and white on the inner. Bill horn-colour; irids hazel; breaſt pale yellow; through the eye a yellow lin- ; tail rather forked, brown; under part of the ſhoulder bright yellow; legs horn-colour. Inhabits England; five inches and a half long; frequents woods, and ſearches about trees for inſects. Firſt noticed in Whitenight's Park, near Reading, Berks, in May 1792: afterwards in the Iſle of Wight,

Wight, and other parts of Hampſhire; by Mr. Thomas Lamb, A. L. S. alſo in Wiltſhire, and near Uxbridge in Middleſex.— Motacilla ſilvatica, *Turton.* Wood wren, *Linn. Tranſ.* ii. 245. Pl. 24.

The DOUBLE-BROWED WARBLER.—This ſpecies is diſtinguiſhed by a black eyebrow over each eye, and a ſimilar one underneath. The top of the head is red, like the M. rufa, or red-headed warbler; but this has a long tapering tail, and is about the ſize of the long-tailed African warbler; the upper plumage is red-brown; the under parts white, inclining to reddiſh on the flanks and under the tail. The female is ſmaller; has not the double eyebrows, which belong excluſively to the male; the top of the head is not ſo ſtrong a red; in other reſpects there is no difference. This ſeems to be a rare ſpecies, inhabiting the country of Karow in Africa. Its neſting is not known, nor even whether it breeds in that diſtrict or not.— Double ſourcil, *Vaillant*, N° 128.

The AFRICAN WARBLER.—The coloniſts at the Cape give the name of *capoc-voogel*, down-bird, to all birds who build their neſts with the down of plants, as they denominate all plants that bear a down *capoc-boſchje*, *capoc-boom*, down-tree or down-ſhrub. See a ſhort account of this ſpecies, vol. vii. p. 354. It is very common about Cape-town, and eſpecially in Swart-land and the downs of Saldana-bay. As the people never hunt them, they are ſo tame, that you may eaſily get near enough to them to knock them down with a ſtick. Nay, they will come in at the doors and windows of houſes with great familiarity, and, without regarding the perſons preſent, will go to the diſhes, plates, and pans, that ſtand aſide, and feed upon the little ſcraps of meat that remain. If they happen to alight upon a plate of mutton-fat, they could fill their bellies with great eaſe and pleaſure; but, ſo fond are they of greaſe, that, if they find a candle inſtead, they will take the pains with their weak bill to pick

pick it clean off the wick. Hence, Vaillant ſays, in the family where he lodged they were commonly called *vet-vreetertje*, little fat-eater. With regard to mutton-fat, he obſerves, that, in the diſtricts which furniſh but little paſture for cows, they uſe the fat of the ſheep's-tails inſtead of butter; and this is particularly the caſe in Swartland.

Finding theſe birds return ſo frequently and familiarly to feed at the houſe where Vaillant lodged, he took the pains to watch for whole days together, to aſcertain the quantity of food they might take, and how many meals they made in a day. A male and female who came regularly together ſeveral times a-day into his room, he having had the precaution of placing food they were fond of within their reach, conſumed in the courſe of four and twenty hours about a quarter of an ounce of fat between them, for they had no young at that time. Their viſits were at fixed times: they generally came about break of day, at eleven in the morning, at three in the afternoon, and about ſunſet; as ſoon as they were ſatisfied, they returned to the thickets; and never failed to repeat their viſits the next day, though I often caught one or other of them and detained it ſome time; and I had fixed a bit of red tape to each of them, that I might always be able to diſtinguiſh that couple. And they well knew their benefactor, as he ſays; for, when hunting near the ſpot, they would follow him for five hundred paces, flying from buſh to buſh, the male repeating his little ſong of *frit-frit-frit, fritraratiti, frit-tatariti*, wagging his long-tail and flapping his wings. "The ſeaſon of love being come, (continues Vaillant,) I found the viſits of my two comrades became leſs frequent. Whether they were fully occupied in that which blunts every other taſte, and ſo gave themſelves up in ſolitude to the company of each other; or whether, the rains being over, and the inſects re-appearing every where, they found plenty of food out of doors,

certain

certain it is that I now saw them very seldom. This neglect lasted more than a fortnight; after which they suddenly renewed their visits with more assiduity than ever, and I presently discovered the interested motive which brought them back. In their former visits, they had not failed to take notice of the wool, moss, and hemp, which I used in stuffing dead animals, for my table was always loaded with such materials: finding it no doubt more convenient to come to me, therefore, to get materials for a nest, than to fly about and pick the woolly down from the shrubs, they often carried away pieces bigger than themselves.

"Having watched them, I soon found the situation they had chosen for constructing the cradle which was to contain the fruit of their loves, which the female, from her size, appeared quite ready to deposit. In one corner of my friend Slader's kitchen-garden, near a little spring, and under the shade of the only tree in the place, grew one of those tall plants called by the colonists at the Cape *capoc-boschje*, or woolly-tree; here I found my pair of birds had begun their operations, having covered the bed or fork of the shrub with a layer of moss to receive their woolly nest. The first materials were laid on the 11th of October; the labour of the second day produced a mis-shapen mass of about four inches thick, the diameter five or six: this was the foundation of the nest, which consisted of moss, some flax interwoven with bits of herbs, and a good deal of wool pressed and platted together. The whole of the second day I remained near the nest, which the female never quitted during the hours of labour, that is, from the moment I opened my windows till ten in the morning, and from five o'clock in the evening till seven. During the morning of the 12th, the male made twenty-nine journeys to my room to fetch materials, (from the garden to the house was about one hundred paces at the most,) and in the evening seventeen only: he however assisted the female a good

good deal in treading the wool with his feet, and preſſing it with his body in order to make a firm but ſoft mattreſs. When the male arrived with a piece of wool or moſs in his bill, he laid it down at the edge of the neſt, or in the fork of a branch within reach of the female, and then away he flew for another load; thus having made four or five journeys without interruption, then he ſet to work to help the female in the conſtruction of the neſt, which pleaſing toil was frequently interrupted by mutual careſſes, though the female often appeared very impatient at being impeded in the needful taſk of finiſhing the neſt, and would endeavour to beat off the male, but he generally ſucceeded in making her ſubmit, and then proclaimed his victory and happineſs by a ſong: this I have ſeen repeated eight times in one morning.

"On the third day, this couple began to raiſe the ſides or walls of the neſt. Having made the bottom even by treading it and rubbing their breaſts againſt it, then by turning over they formed firſt a flat ledge, which they afterwards raiſed up by leaning and puſhing againſt it; they increaſed the height by heaping on wool previouſly beaten and preſſed within the neſt with their breaſts and pinions, taking care to pierce it with their bills alſo, in order to interweave a more ſolid maſs. The branches of the ſhrub were intirely included in the exterior thickneſs of the neſt, no part of them appearing within.

"This labour demanded a conſiderable quantity of materials, and indeed I was aſtoniſhed to ſee how much they uſed. On the ſeventh day, the neſt was finiſhed, except ſome little reparation in certain parts. Putting in my finger on that day, I felt an egg, which had been laid probably that very day; for on the evening before, the top not being covered in, I could ſee no egg. This beautiful edifice, when completed, was as white as ſnow, about nine inches high outſide, but ſo thick that it was not above five inches high at the

the moſt within. Its outward ſhape was very irregular, on account of the branches which it was neceſſary to work in; but the interior was exactly in the ſhape of a hen's egg with the narrow end upwards, the greateſt diameter five inches, the ſmaller one four. The aperture, or entrance, appeared to be at leaſt two-thirds of the total height of the neſt as ſeen from without, but it was in fact very little above the floor or bottom within; this aperture was an inch and a half wide, and entirely round. The inſide of the neſt was ſo finely wrought, and ſo ſmooth, as to look like beautiful linen cloth a little worn; the texture was ſo firm and cloſe, that nothing could be pulled away without tearing it. This ſolid edifice, however, required ſeven days hard labour; preſſing and rubbing the materials with their breaſts, beating them with their pinions; interweaving threads of wool, by driving them through with their bills, &c. the work is indeed admirable, when we conſider the weakneſs of the architects. All was complete, and an egg laid, on the evening of the 18th of October. On the 19th I found a ſecond egg, which was laid in the morning; no egg was laid on the 20th. On the 22d, at my firſt viſit, I found the fourth, and the ſame evening the fifth. On the 23d no egg. On the 24th in the morning another egg; and a ſeventh on the morning of the 25th, on which day the female began to ſit. The eggs were all of a pale green, with rufous-brown ſpots. I obſerved, that, during the whole time of building and laying, the neſt was conſtantly watched; the male or female, often both, kept near at hand, conſtantly alarmed at any viſit of curioſity, or at the approach of any other birds whom ſuch a commodious habitation would have ſuited very well, and who often endeavoured to take poſſeſſion; and I believe, that, without my aſſiſtance, it would have been ſeized upon by a pair of titmice, who were ſtronger than the owners. Theſe kinds of burglaries are not unfre-

quent among birds, eſpecially thoſe whoſe neſts are conſtructed in this manner; ſo that I have many times obſerved the poſſeſſors of a neſt not to be the birds that built it. It is not therefore among men only that the weak are oppreſſed by the ſtrong, and that marauders avail themſelves of the labours of others. But there are certain birds among whom theſe thefts are more common; for all are not guilty of them. To return,

"The male and female ſat upon the eggs alternately; and I was as regular as they, for, excepting when at meals or at reſt, I kept watching them continually, concealing myſelf in a neighbouring thicket. The male however did not take ſo great a ſhare in hatching as the female; for ſhe often remained on the eggs for three hours together, but he never more than half an hour at a time; and that was only when ſhe was obliged to quit her poſt in queſt of food; and then ſhe ſoon returned ſtraight to the neſt, called out the male, and took his place; if he did not come out directly, ſhe went in and drove him off; for I never ſaw them both ſit together, not even in the night; at leaſt, however late I might ſtay at my poſt, I never ſaw the male enter with his female at thoſe times, but ſhe kept her poſt the whole night. While the female ſat on the eggs during the day, the male, on a neighbouring buſh, kept cheering her with his ſong; if any ſtranger came into the garden, or even one of my dogs, the female was preſently informed of it by a piercing cry from the male, which made her as ſuddenly pop out of the neſt, but ſhe went in again as ſoon as the danger was paſt. But my appearance in the garden never cauſed any alarm. I obſerved that the male paſſed the night on a neighbouring branch, no doubt to guard againſt any thing that might alarm the female or injure the brood; and, if any fright occaſioned her to quit the eggs, it was never for more than four or five minutes at a time. During the time

time of incubation, the male frequently made advances, but the female would never admit his embraces; ſhe continued, however, to lay eggs after this, but always out of the neſt and upon the ground; and what ſurpriſed me, as ſoon as ſhe had laid one, ſhe called the male, and they both ſet about breaking it to pieces with their bills, after which they devoured the yolk. At length, on the 7th of November, on the fourteenth day of incubation, at ſeven in the morning, which was my firſt viſit, I found four young, which probably had been hatched in the night; three hours after, that is, at ten o'clock, the other three had made their appearance. The young were hatched entirely bare of feathers, and their eyes were cloſed.

"The mother remained over the young during the whole of the firſt day, and did not feed them till evening. She cleared the neſt of the egg-ſhells, throwing them out by degrees as the three laſt came forth. The ſecond day, the father and mother brought food to the young ones ſeveral times, and the neſt was not left vacant a moment. On the third day, the top of the head, the wings, back, and rump, of the young birds, were covered with down of a browniſh colour, and their eyes were half opened; on the fourth day, their eyes were nearly open, and that ſame evening entirely ſo. On the fifth, the wing and tail feathers began to riſe a line or two, and thoſe alſo of the rump and ſides, whoſe tubes or quills were now viſible. They now began to require a good deal of food.

"The ſixth day I ſpent entirely in watching the neſt; and had my dinner brought to me, that I might not loſe ſight of it for a moment. Between ſeven and ten in the morning, the father and mother had made fifty-three journeys, bringing each time little green caterpillars, ſpiders, and ant-eggs. Towards noon they made nineteen journeys; but from three o'clock till ſunſet the number of their journeys amounted to

ſixty-ſix. On the eighth day, the wing and tail feathers, and the plumage of the upper ſurface of the body, and of the belly, were ſo complete, that the ſkin was now viſible only on the lower belly. On the tenth, eleventh, and twelfth, days, they required ſo much food, that the old ones did nothing but fly backwards and forwards in queſt of it; on the eleventh, which I devoted entirely to them, theſe poor birds made 200 journeys; but, what is remarkable, I never obſerved that they brought any drink. But, as both male and female went quite into the neſt to feed the young, it may be ſaid that I could not ſee whether they gave them water or not; yet, as I never ſaw them return without bringing food in their mouth, it is certain that they never went to fetch water only; and I cannot doubt but, if the little ones had had need of drink, the father and mother would have made journeys on purpoſe. On the fifteenth day, when I came to pay my morning viſit, I found that three of the young birds had quitted the neſt. To bring them to this, the father and mother no longer went in to feed, but called them out; ſo that hunger brought them out one after the other. At noon the neſt was empty and abandoned; the young ones got among the hedges and under leaves in the garden, where I ſaw the old ones carry them food for ſeveral days, after which they formed a flock, and lived all together in the moſt perfect harmony. The old ones did not fail to ſhow the new brood the way into the houſe, where they often came to forage as their parents had ſo ſucceſsfully done. On quitting the neſt, the young were brown on the upper ſurface, each feather edged with rufous; and the under parts of the body yellowiſh white.

"From the obſervations I have detailed, which I pledge myſelf are correct, it appears, that theſe birds are ſix or ſeven days building their neſt, that they ſit thirteen or fourteen, and that the young in about the ſame ſpace are ready to quit the neſt. I expected

that

that the little family would return to their neſt at night; but I was deceived; they came back no more. Finding this, I took the neſt away, and cut it quite through longitudinally, in order to examine it minutely, and find all its dimenſions, which I have given above. I found many of theſe neſts in my travels; they were all alike, but more or leſs white, from the nature or tint of the cottony down which had been uſed in their conſtruction."

The female is of a red-brown on the upper ſurface, yelloviſh-white underneath; the tail is long and taper; bill brown, legs and feet red. The male is ſomewhat larger; his body is of a more decided brown, and on his breaſt and front of his neck are ſome ſpots of a lengthened form along the middle of each feather. The eyes in both ſexes are light brown. This ſpecies inhabits not only the environs of the Cape, but many other diſtricts, eſpecially the eaſt coaſt and the borders of the Sondag and Swart-kop. The laying is from five eggs to eight. The eggs of the creſted cuckow are often found in theſe neſts, which is very remarkable; for that bird, being very little leſs than the European cuckow, could never get into the neſt to lay an egg.—Motacilla Africana, *Gmel.* Capocier, *Vaillant's African Birds*, N° 129, 130.

The GOLDEN-NECKED WAGTAIL.—Size of the nightingale. Judging from a diſſection of the throat, Vaillant ſuppoſes it to have a fine voice; but as he met with it in the rainy ſeaſon at the Cape, when moſt of the warblers of that country are mute, he was not able to aſcertain the fact.

The plumage of this bird would be very dull and uniform, were it not enlivened by a beautiful plate of gold-yellow which covers the throat and part of the front of the neck; the breaſt and reſt of the under part of the body pure white. A fainter yellow forms an edging to the lateral tail-feathers, and appears on the middle of the firſt wing-quills, and at the edges of the

the great coverts. A yellow mark, as deep as that on the breaſt, goes round the forehead above the eyes. The upper ſurface, including head, wings, and tail, is of a light brown colour; bill, feet, and nails, black; eyes reddiſh. The female reſembles the male, with the uſual exception, namely, that her colours are faiater, eſpecially the yellow on the throat. Inhabits the Auteniquois foreſt, but not plentiful. Seems to reſemble the yellow-throated warbler, vol. vii. p. 405. —Coldor, *Vaillant*, N° 119.

The Orange-thighed Warbler.—Olive, beneath white; head with a tranſverſe white bar; thighs and vent orange. Inhabits Louiſiana: five inches and a half long; tail rounded.—Motacilla trichias, Orange-thighed warbler, *Turton*.

The Sand Wagtail.—This is ſomewhat larger than the Cape wagtail; however this, the white wagtail, and the Cape wagtail; vol. vii. 408, 413, are very nearly of a ſize. In plumage, manners, and habits, it reſembles the white wagtail; it is however ſufficiently diſtinct, as we ſhall preſently ſhow.

Seldom more than one pair are ſeen together, for the males fight deſperately whenever they meet; if a larger company be obſerved, it conſiſts aſſuredly of the parent-birds and the young who have but lately quitted the neſt, and are not yet provided with habitations for themſelves. White and black are the only colours of this bird; yet theſe are ſo agreeably diſpoſed as to form a very pretty bird. A ſtripe of white goes over each eye, and reaches a good way back; the throat, front of the neck, flanks, all the belly, and under the tail, are white alſo. The head, back and ſides of the neck, are of a decided jet black, and a patch of the ſame extends to the breaſt; the mantle, ſcapulars, back, and the middle quills of the tail and wings, are black alſo; the latter taſtily fringed with white; and there are two white ſpots on each ſide, juſt at the pinions. The lateral tail-feathers have

have progreſſively more white as they recede from the middle, ſo that the two outer ones are black only at their origin. The bill and feet are black; the eyes brown.

The female is ſomewhat ſmaller; the black colour of her plumage rather inclines to grey; but the diſpoſition of the colours is preciſely the ſame, and it is very hard to diſtinguiſh them, for it is not till their third moult that the male is of a more decided black than the female. When young, the reſemblance is complete, both male and female being of a ſlate-colour, much lighter than the adult female. The full-grown male has a ſharp cry, which is his call; and alſo a little ſong, expreſſing *pzit-pzit*, *prizizi-prizizi*, the note of pleaſure and gaiety.

Theſe birds ſeldom build upon high trees; but commonly on rocks, or on the ſandy ſhore, where they may be ſeen running with vaſt ſwiftneſs, ſhaking their tails, and picking up all the inſects they meet in their way; flies alſo they will purſue, and catch them on the wing, but not ſo dexterouſly as the fly-catchers, becauſe they have neither the large bill nor the convenient briſtles of thoſe birds. They will ſometimes go into the water up to their bellies in purſuit of an inſect appearing on the ſurface.

The wagtails of Africa are more ſhy and timid than thoſe of Europe. The preſent ſpecies builds a neſt on low buſhes near rivers; ſometimes in a hole in a rock ſtanding in the water; or in the trunk of a dead or worm-eaten tree floated on-ſhore from ſome river. The compoſition of the neſt is plants and moſs, lined with hair and feathers; the eggs are five in number, and the male ſhares with his female the taſk of incubation. This ſpecies is firſt met with on the banks of Orange River, in the 28th degree of S. lat. but not farther ſouth; from that point to the tropics, it inhabits the banks of all the rivers, but not on this ſide of Orange River, nor in the parallel parts

of

of Caffraria on the eaſt coaſt. The Namaquois call it *a-guimp*, or "runner upon the ſand."—Aguimp, ou Lavandiere pie, *Vaillant's African Birds*, N° 178.

The VARIEGATED WAGTAIL.—The male of this ſpecies has a narrow black collar on the lower part of the neck in front. It is about the ſize of the common wagtail; it perches on trees, differing from the preceding which prefers running on the ground. Its legs are ſhorter than the generality of wagtails have them; but what determines it to belong to this genus, Vaillant ſays, is the ſhape of the wing, the firſt and laſt feathers being longeſt, and forming a returning angle about their middle, like thoſe of the ſnipes, plovers, and ſome others. In ſhort, this is a real wagtail; it wags its tail as it runs along the ground in ſearch of worms. Its cry and call are ſimilar to thoſe of the preceding.

The top of the head and back of the neck are light brown with an olivaceous tint; the ſame prevails over the mantle and ſcapulars. The wings are black; there is a whitiſh ſpot in the middle, and the larger coverts are edged with white; below this edging, the large feathers are marked with yellow. The under part of the plumage is a compoſition of brown and dirty white, on which appears the browniſh-black collar or breaſt-band. The four middle feathers of the tail are black; the others more white as they recede from theſe. The eye is brown; the bill yellowiſh, the legs red. The female has no collar. It ſeems to be a raré ſpecies; Vaillant met with it in Caffraria only, but never diſcovered the neſt.—Lavandiere variée, *Vaillant*, N° 179.

The ANT-EATER.—This ſpecies, though not larger than the Hottentot wheatear, vol. vii. p. 374, is however much ſtouter, the bill thicker, tail ſhorter, and legs ſtronger. It differs alſo in colour, and is much more ſhy; it frequents neither the Dutch ſettlements nor the hordes of the ſavages, but remains in the

the open country, and chiefly where it finds thoſe hillocks which are raiſed by the ants of Africa; upon theſe it perches, feeding on the larvæ of thoſe induſtrious inſects. But the ſolid abodes conſtructed by theſe ants would be impenetrable by the bill of the wheatear, were it not for a quadruped, the great ant-eater of the Cape, (a ſpecies totally different from the ant-eaters of the new world, but deſcribed by Buffon in his Supplement,) which turns up the ant-hills with his ſnout, and devours the inhabitants. In theſe ruined habitations the ant-eater wheatear builds and rears its young, finiſhing the buſineſs of deſtruction which the real ant-eaters had begun; but ſometimes the wheatear builds under a mole-hill, or in a hole in a rock; laying four or five white eggs. Theſe birds commonly fly in pairs, and the young ones continue with the parents longer than ſome ſpecies we have mentioned.

The male differs from the female by a white ſpot on the ſhoulder, ariſing from the ſmaller coverts of the pinions; and ſome of the intermediate wing-feathers are white at their ſides. But the general colour of the plumage is dull brown on the upper ſurface of the body, wings, and tail; fainter on the belly and under the tail. The throat is tinged with rufous, as well as ſome of the feathers of the neck and breaſt. The bill, feet, and nails, are black; the eyes dark brown. The white ſpot on the wing does not appear till the ſecond moult. The female is rather ſmaller; and, what does not often happen, of a darker brown on the body.

This ſpecies was found near the Sondag and Swart-kop rivers, about Caffraria; and differs from the Hottentot wheatear in perching on high trees. Its note or cry is *trrrri-hir-hi-hirrr*, dwelling much upon the *r*.—Traquet fourmillier, *Vaillant*, N° 186, 187.

The STRIATED WAGTAIL.—This ſpecies has "ſtriæ acroſs the tail, evident not to the ſight only, but to the touch, by paſſing the fingers over the ſtems of

the two mid-quills, where theſe ſtriæ riſe and fall." It has alſo a white ſpot on each ſhoulder, ariſing from the top of the wing-coverts and from ſome of the ſcapular feathers, which laſt have moſtly a black ſpot at their tips. On the middle of the belly appears a red ſpot, and the under tail-coverts are of the ſame colour. The reſt of the plumage is gloſſy black, except that the extremities of the wing-quills incline to brown. The lateral feathers of the tail are tapered. The bill and feet are black; the eyes maroon-colour. The female is ſmaller, and of a duller black.

This ſpecies inhabits the buſhes and mimoſa-woods of Caffraria; ſaid alſo to inhabit Bengal; makes its neſt on the ground under a thick buſh; lays four grey eggs, which the male and female ſit on by turns. Its cry may be expreſſed by *tac-tac-trac*, *tac-tac-trac*, which the male repeats inceſſantly, clapping his wings and raiſing his tail at the ſame time.—Traquet à queue ſtriée, *Vaillant*, N° 188, fig. 1.

The Red-vented Wagtail.—Inhabits the ſame places as the preceding. "The whole of the under part of the body, from the lower part of the breaſt including the under tail-coverts and the plumage of the thighs, are decidedly red, a little paler on the lower belly." The rump, the upper tail-coverts, the tail itſelf, (except the two middle feathers which are blackiſh-brown,) are of a ſtrong red, like the under parts of the body. The head, neck, mantle, and upper wing-coverts, are jet black; the large wing-quills are black, growing browner towards their points; the under wing-coverts are red. The bill and feet are black; the eyes red. The female differs only in being ſomewhat leſs than the male. The neſt Vaillant never met with; nothing therefore is known of its manner of incubation. The note was very ſimilar to that of our robin-redbreaſt.—Traquet à cul roux, *Vaillant*, N° 188, fig. 2.

The Commander Wheatear.—This reſembles the

ant-eater, and like that frequents the ant-hills to feed upon the larvæ of thoſe induſtrious inſects. They go in little flocks, conſiſting of the parents and the young brood, which do not ſeparate till the latter are fit to produce a new generation. Why Vaillant called this ſpecies *commandeur* we cannot tell. The plumage is black with a browniſh tinge in certain poſitions, except the pinions of the wings, which are fleſh-colour, more intenſe in the male. The female is ſmaller than the male; both have the bill and feet black, and the eyes reddiſh-brown.

This is abſolutely a new ſpecies, inhabiting the weſtern coaſt of Africa, from the 28th degree of S. latitude to the tropic. Vaillant had not an opportunity of examining the eggs or neſt; but was aſſured by the ſavages that they neſtled in deep holes under ground, which appeared likely, as thoſe he ſhot had commonly their plumage ſoiled with earth; and from the number generally ſeen together, it is evident they lay from five to eight eggs, for a flock ſeldom conſiſts of leſs than ſeven, including the parent-birds, or more than ten.

The plumage of the young bird is of a reddiſh brown, and the ſhoulder-knot white; at which time it might be eaſily miſtaken for the ant-eater, only that the latter has a much ſtouter bill. Several of this ſpecies have been brought from Malymba; they are exactly ſimilar to thoſe from the ſouth of Africa.—Traquet commandeur, *Vaillant's African Birds*, N° 189.

The RUNNING WAGTAIL.—The largeſt and ſtouteſt of the African ſpecies. It frequents the ſcorched and barren plains, and lives ſolitary. Ever upon the ground, and running, it eaſily tires out and eſcapes the fowler, for it is very cunning; it ſeems fonder of running than of flying, eſpecially when in danger, like the rock-thruſh, called by Vaillant *l'eſpionneur*. See p. 349 of this volume.

The running wagtail, however, finds abundant provision in theſe barren ſpots; for inſects, and eſpecially graſs-hoppers, are its principal food. You need not expect to ſee more than one male and female in the ſame canton, and them only by chance, ſince, being always on the ground, the ſcattered ſhrubs in the plains of Nameroo hide them from the view; but the piercing cry of the male to his female may be heard at ſome diſtance, and thus betrays him; then your only chance is to ſhoot before the pair fly off to the next buſh; for, when once alarmed, all purſuit is vain.

The length of the male, by a line drawn from the extremity of the bill to the tip of the tail, is ſeven inches and three lines. "The top of the head from the eyes and noſtrils, is entirely white. The tail, which is tapered, is white at the ſides, and black in the middle; i. e. the two mid-quills are black, the reſt white." The lower belly and under tail-coverts are white alſo. The reſt of the plumage is jet black, like the blackbird of Europe. The bill, which is hooked at the tip of the upper mandible, is black; ſo are the legs, feet, and nails; the legs are very long, and formed for running. The eyes are dark brown. The female is ſomewhat leſs; and not of ſo jet a black, but rather tinge of brown. Vaillant was not able to ſpeak with certainty of their mode of incubation, but has no doubt that, like the reſt of the wagtails of the plain, they build on the ground, and even in holes.—Traquet coureur, ou à calotte et queue blanche, *Vaillant*, N° 190.

The Lark Wheatear.—With this ſpecies Vaillant concludes his liſt of wagtails, proceeding then to the larks; and he obſerves that the preſent may be conſidered as a connecting link between thoſe two genera.

With the exterior appearance of the larks, the bird unites the manners and flight of the European wheatear, M. œnanthe. Yet it does not find that abundant

abandant food which the cultivated lands of Europe preſent; however, among the barren ſands and parched mountains of Africa, it diſcovers ſome open places ſuited to its inſtincts and to its wants. Under a heap of ſtones, or in a hole, the lark-wheatear fixes its ſolitary dwelling, and brings up its young. This bird is very ſhy, and runs into its hole at the leaſt appearance of danger. Differing in theſe reſpects from the larks, it reſembles them in the ſtoutneſs of body, the ſhape of the bill, and laſtly in the length of the hinder claw of the foot.

The plumage is generally black; but the round tips of moſt of the feathers are yellow, and give the appearance of ſcales; the ends of the laſt alar feathers, and the tip of the tail, are yellow alſo; and ſome yellow appears on the under parts. The bill is yellow at the baſe, black at the tip; the feet and nails brownish black, the eyes red brown.

The male is ſtouter than the female; the black on his head has a purple gloſs, which does not appear at all in the female; nor are the ſcales on the plumage ſo bright a yellow in the female.

This ſpecies inhabits the country of the Great Namaquois, in barren plains and at the foot of rugged hills; but ſpends only the ſummer there. The eggs are about five, of a pale blue with reddiſh ſpots.—Tracal, *Vaillant*, N° 191.

The AFRICAN WHINCHAT.—This ſpecies inhabits the Auteniquois country, perching on buſhes. It is about the ſize of the European whinchat, vol. vii. p. 364. but extremely wild and ſhy, rarely approaching the haunts of men; ſometimes it may be ſeen in the cattle-incloſures; but, if a man approach, flies off directly; then you may diſcover that the rump is white, as are alſo the four lateral tail-feathers, which it ſpreads much as it flies. It is called *tractrac*, becauſe it ſeems to expreſs that ſyllable repeatedly in its cry. In flapping its wing and ſhaking its tail it reſembles the reſt of the ſpecies. There

There is nothing ſtriking in the plumage. It is cinereous grey on the head and mantle, lighter on the lower part of the back, and entirely white on the tail-coverts; the front of the neck and breaſt are lightiſh grey; the reſt of the under part white. The twelve tail-feathers are black tipped with white, and of equal length; the four firſt on each ſide are edged outwardly with white, the fourth and third have it only toward their origin, the third, however, rather more than the fourth; the two laſt, i. e. the outermoſt of all, are white all along. The wing-feathers are brown, edged, the firſt of them with light brown, the laſt with white. The bill, legs, and feet, are black; the eye, which is very large, nut-brown; a row of white feathers encircles the eyelids.

This bird digs a hole for its neſt at the foot of a dwarf-tree or buſh; the eggs are four in number, greyiſh, with an infinite number of brown dots.

Though this ſpecies be very difficult of approach, M. Vaillant ſucceeded in killing eight males and five females. The latter were rather ſmaller, and the white over the vent not ſo extenſive. In the young bird, the feathers of the mantle are bordered with rufous.—Traquet tractrac, *Vaillant*, N° 184, fig. 1.

The Mountain Whinchat.—This ſpecies in its manners reſembles the rock-thruſh, or that ſpecies which Vaillant calls *rocard*, which is the African rock-thruſh. Neither are found but in rocky mountains, in the holes of which they make a neſt; and few birds are equal in cunning to theſe: their diſpoſition is nearly the ſame. See p. 347 of this volume.

This mountain bird is rarely ſeen on the plain; it never deſcends but in time of great drought, when the ſun has evaporated all moiſture from the rocks; then it takes long journeys to reach a ſpring or a river. This bird tries the ſkill and patience of the fowler; at the leaſt appearance of danger, it flies to the top of a high rock; the report of a gun drives it to the other

ſide

ſide of the mountain, or into a deep hole, till the danger be paſt.

The general plumage of this ſpecies, in its perfect ſtate, that is, after the firſt moult of the ſecond year, is black; but the belly, ſhoulders, the coverts of the tail, and the margins of its lateral feathers, are white. The eyes are brown; bill and feet black. The female reſembles the male in colour, but is rather leſs.

The young birds, until the ſecond moult, both males and females, are of a delicate ſlate-colour, bluiſh on the body, paler beneath; the wing-feathers are blackiſh margined with grey; the middle feathers of the tail black, the laterals partly white; the rump white, the ſhoulders very light grey; the bill and feet brown, the eyes reddiſh brown. At that inexperienced age, they are eaſily killed. In the middle age, or after the ſecond moult, the plumage varies greatly in different individuals; they are then diverſely ſpotted with grey, white, and black; for part of the firſt plumage remains in different places. Sometimes the mantle only remains grey, or perhaps even only on one ſide; ſometimes the head continues grey; in other birds, the grey and black feathers are about equally diſtributed. Only the plumage of the rump and the lateral tail-feathers keep always the ſame colours.

Rarely but in the pairing ſeaſon are theſe birds ſeen in couples: when the young begin to fly, the family remains together for a ſhort time; but, the moment they are able to provide for themſelves, they ſeparate, and live apart. Even the old ones, having no longer a brood to take care of, forget each other, and live apart till the ſeaſon of love calls them together again; then they call to each other with a loud cry that makes the hollow rocks reſound. From the difficulty of reaching the place where theſe birds build their neſts, Vaillant was never able to procure the eggs. He met with the ſpecies in the Namaquois country

country only; they feed on worms and ſoft inſects.—Traquet montagnard, *Vaillant*, N° 184, fig. 1, and N° 185, fig. 1, 2.

The African Stonechat.—This ſo much reſembles the ſtonechat of Europe, M. rubicola, vol. vii. 361, that perhaps it may be only a variety formed by the difference of climate; and whatever Buffon has related of the habits of that ſpecies may be applied to this, which is very common about the Cape of Good Hope, along the whole eaſtern coaſt, and in the interior country, chiefly in burnt-up uncultivated places. It does not frequent trees, or at leaſt only the loweſt branches, or a withered trunk; it generally prefers the loweſt tufts, or even a ſingle ſtem; for though it inhabits the Auteniquois country, which contains vaſt foreſts, it is ſeldom found in the woods. It is not a bird of paſſage, but conſtantly remains in that part of Africa we are ſpeaking of. The ſame remark will apply to the following ſpecies. The male and female are generally ſeen together; they are fond of perching ſide by ſide on a heath-plant or on any ſingle ſtalk, ſo that it is eaſy to kill both together, eſpecially as they are not ſhy; when they fly off ſeparately, they only ſkim along the ground till they meet again on the next low perch they find in their way; they wag their tail, flap their wings, and are always in action. When near inhabited ſpots, they frequent the incloſures of cattle, where they find abundant nouriſhment. They are moſt frequent in Swartland and in the barren plains about the Cape. They hide their neſt with the greateſt care under a mole-hill at the foot of a ſhrub, or in a hole in a rock, or even under a heap of ſtones. The laying is five eggs, ſpotted with light brown; the male and female ſit by turns.

The male is of the ſize and appearance of our ſtonechat. The head and throat are very dark brown, almoſt black; at the ſides of the neck is a broad white patch, which becomes narrower towards the hind-head; and

and another white ſpot on the middle of the wing. The upper and under tail-coverts and belly are white; the mantle and ſcapulars black brown; the breaſt dark red, lighter on the flanks. The bill and legs are black. The female is ſomewhat leſs, and differs totally in colours; for whatever in the male is nearly black is in her light brown; ſhe has no white but on the wings, tail, and belly; at a certain age a few white feathers appear on the part where the male has a complete white collar; her bill and feet are brown. The young birds are almoſt entirely of a light brown, having ſome white only on the belly, on the middle of the wing, and at the laſt quill on each ſide of the tail. The deſcription given by Buffon of his *motteux verdatre*, our M. aurantia, vol. vii. p. 375. agrees very well with the female of this, except that the length of ſix inches is rather exaggerated.

The ſettlers, being accuſtomed to ſee this ſpecies among their cattle, in the incloſures, where they find plenty of the worms they are ſo fond of, call it *ſchaapwagtertje*, which ſignifies "little ſhepherd."—Traquet pâtre, *Vaillant*, N° 180.

The FAMILIAR WAGTAIL.—In every claſs of animals there are ſome ſpecies, which, while they preſerve their liberty, are in ſome ſort domeſticated, and, finding no danger in the ſociety of man, venture to approach him, and to live as it were with him. Thus they procure comforts which we ſuffer them to enjoy in peace, becauſe, happily for them, we find no advantage in enſlaving them, and becauſe, in return, they do us no injury. Such, among birds, are the ſwallows, who neſtle and rear their young almoſt in our houſes; and the ſtorks, which in Holland are ſo familiar, that they walk fearleſsly in the fiſh-markets, where they find abundant nouriſhment, as each dealer throws them ſome offal; and theſe birds may be careſſed and ſtroked like dogs. There are even reptiles familiariſed in this way; for at Surinam you may find

in almoſt every houſe a ſerpent or two of one particular ſpecies, which take up their abode there, and are never diſturbed, becauſe they do no hurt, but catch mice as nimbly as a cat. "And who knows," ſays Vaillant, "if man had never abuſed the power which ſtrength or cunning has given him; who knows, I ſay, but all animals would have regarded him with love, or at leaſt not have ſhunned him? None has been more qualified to make obſervations upon this ſubject than myſelf; for, in the midſt of deſerts where man has not yet eſtabliſhed nor exerciſed his power, we may fairly judge of the nature of animals with reſpect to man. And I have always found, in wild uninhabited places, many animals not only eaſy of approach, but which even come to meet us, and look at us; and I have ſeen many wild birds taken with the hand. But the caſe was ſoon altered, when they began to find the danger of ſuch viſitors; it was then neceſſary for us to move farther inland, and abuſe the confidence of more inexperienced victims."

Of all the familiar birds, none equalled the preſent ſpecies, which Vaillant and his Hottentots called *vrintje*, or little friend. The ſame bird followed them during ſeveral ſtages or encampments; moving as they did, and reſting when they reſted. One pair in particular, remained all the while that Vaillant was encamped on the banks of the Great River, which was a conſiderable time, becauſe he made ſeveral excurſions while his tents and cattle remained there; and the ſame couple followed him to his forlorn habitation, called Schæmacher, mentioned in his ſecond voyage. Upon his quitting that place, they left him, it being the love ſeaſon, when they were impelled to build a neſt, and provide for a new progeny.

This ſpecies, like the reſt, is ever in motion, flapping its wings and wagging its tail. It rarely ſtands upon the ground, and never remains there longer than is neceſſary for picking up an inſect or a worm, which

which it eſpies at a conſiderable diſtance, and darts upon from ſome little riſing, or from a ſhrub, or from a ſtone, or even from a piece of horſe-dung; for it ſeems to diſdain touching the earth with its foot. The couple which accompanied Vaillant were generally perched on the end of the beam of one of his carts, or upon the axle-tree; but, when they had made a good meal, their favourite place was one upon each horn of a giraffe, the ſkin of which was ſtretched out upon a hurdle to dry. He could almoſt at any time take the male in his hand and careſs it, but the female was more ſhy. Upon the whole, he is of opinion, that no animal would be more eaſily tamed and domeſticated.

The male of this ſpecies is about the ſize of a ſparrow; the female rather leſs. The ſpecific character is, "the ears, rump, and outer barbs of the lateral tail-quills, rufous." The reſt of the plumage is a delicate brown-grey, ſlightly tinged with red, darker on the upper ſurface, breaſt, and ſides; fainter on the neck, and on the belly whitiſh; the wing-quills and their coverts are dark brown fringed with light brown; the intermediate tail-feathers are entirely of the latter colour; the bill and eyes are brown; the legs and feet black. The plumage of the female is in all parts fainter. Buffon's *traquet du Cap* reſembles this, and is perhaps the ſame. Yet he deſcribes the upper ſurface to be very dark green, whereas no ſhade of green appears in the preſent ſpecies. Neither does he mention the red over the ears; but, as that does not appear till the bird is full-grown, it is poſſible Buffon might have received a young one from the Cape.

The familiar wagtail inhabits all the weſt coaſt of Africa to the tropic. It makes a neſt under a ſtone, or in a hole in the ground: the eggs are four in number, of a greeniſh grey colour ſpotted with brown. The male ſhares with the female in the cares of incubation; they are always together. The young, when able to fly, ſtill follow the parents, forming a little

flock or family, till the pairing-time ſeparates them to provide for themſelves in like manner.—Traquet familier, *Vaillant's African Birds*, vol. iv. p. 97. N° 183.

The THRUSH WARBLER.—This may be compared for its mellow tones, to the Motacilla atricapilla, or black-cap, (vol. vii. p. 340.) yet its ſong is better ſuſtained and more connected; and perhaps would be better deſignated by comparing it, though on a ſmaller ſcale, with the ſolitary thruſh, (vii. 64.)

Like moſt ſinging-birds, it is in the coolneſs of the morning, and a ſhort time before the ſetting of the ſun, that this bird delights to warble out its ſweet ſoft notes. The male only ſings: the female has a kind of cry, *tritric-tric—tritric-tric*, often repeated; and the male calls in the ſame accents when ſeeking his mate. It is only in the pairing ſeaſon that the male warbles his ſong, which may be called the ſong of love, ſince he is ſilent all the reſt of the year, or at leaſt he at other times only utters the cry we have ſpoken of. In October, November, and December, the neſts of theſe birds are found, always a few feet from the ground, in a thick tuft of underwood. The laying is four or five eggs, ſometimes only three; of a very faint green with brown patches, eſpecially at the great end. As ſoon as the young are hatched, the male aſſiſts the female in tending them; and he ſings only at ſuch times as, after being fed, they repoſe beneath the mother's wings. Their chief food is inſects, caterpillars, and ſome kinds of berries. The ſpecies of birds in the deſerts of Africa who live upon inſects is very numerous; for the ſoil, being at no time much cooled, abounds with vaſt quantities of inſects all the year; and nature has therefore placed, ſays Vaillant, in thoſe regions, a proportion of animals deſtined to deſtroy them, in order to keep up the balance neceſſary for the continuance of her work. And, if ſome of theſe ſpecies (of birds) peck occaſionally at fruit, it is not

not for the purpoſe of eating, but to ſqueeze out a juice to quench their thirſt.

In the neſt of a thruſh-warbler, Vaillant one day found an egg belonging to that ſpecies of cuckoo which he calls the *criard;* (ſee p. 223 of this volume.) But whether this bird is in the habit of nurſing a ſtrange progeny could not be known, becauſe the cuckoo's egg, which lay in the neſt with two others belonging to the owner of it, was no longer there when he viſited the place a ſecond time, but the female had in the mean time laid two other eggs, which ſhe was hatching with the two firſt. The ſhells of the cuckoo's egg lay on the ground, which ſhowed that it had been thrown out and rejected. It is therefore apparent, that all the birds to whom the cuckoos confide their eggs do not take equal care of them.

The male of this ſpecies is ſomething ſmaller than our nightingale. His colours are not ſhowy; brown-grey on the head, neck, mantle, and wings; ruſt-colour on the upper tail-coverts and rump; white, ſhaded with brown, is the prevailing colour on the under parts of the body; a cleaner white covers the throat and front of the neck, with ſome lines of a blackiſh caſt. A white line towards the forehead ſtretches like a brow over the eye, and runs towards the hind-head. The wings are enlivened by a white feſtoon which goes round the larger covertures and part of the ſcapulars; a ſimilar edging appears on the tips of the lateral tail-quills, which are ſhorter than the mid-quills, and of a greyiſh-brown colour, as well as the outer barbs of the reſt, which within are blackiſh, as well as the inner barbs of the wing-quills. The eyes are very large, of a light-brown colour; bill and feet the ſame. The mouth, tongue, and baſe of the lower mandible, are yellow. The female is ſomewhat ſmaller; of a fainter brown, the white inclining to rufous; but eſpecially the red on her rump is not ſo ſtrong. Inhabits the pleaſant ſhores of the Gam-

toos,

toos, and the mimoſa-woods on the borders of Sondag and Swart-kop rivers.—Grivetin, *Vaillant*, N° 118.

The Swallow Warbler.—It is black with a gloſs of ſteel-blue; throat, breaſt, and vent, crimſon; belly white, with a longitudinal black band. Inhabits New Holland.—Motacilla hurundinacea (hirundinacea), the ſwallow warbler, *Turton*, from *Nat. Miſc.* 114.

The Sharp-tailed Fig-eater.—Vaillant deſcribes this as the only bird he met with in Africa having a pointed tail, ſomewhat reſembling that variety of the Hirundo pelaſgia which is called the Louiſiane ſwallow, (ſee vol. vii. p. 481.) yet the points of the feathers are not ſo long nor ſo finely tapered as in that bird. Every tail-feather, except the two ſhorteſt on each ſide, end in a bare unbarbed point, like ſo many needles, ſo that the ſpecies is eaſily known at firſt ſight. Its chirping is very agreeable. Its colour is totally different from the reſt of the African fig-eaters. The upper ſurface, including head, wings, and tail, is entirely of a bright red; the under part, from the throat to the belly, is lemon-colour, growing fainter towards the lower-belly, which is white, as well as the under tail-coverts. The two primary wing-quills are browniſh, as are the tips of the ſeven or eight following. The bill is black; the legs and feet light brown, the eyes brown red.

The female is yellow only on the throat; the under part of the body white clouded with rufous on the flanks; the upper ſurface is preciſely as in the male. Vaillant's figure of the female is faulty in the colouring.

This ſpecies inhabits the mimoſa-trees on the ſhores of the Great River, about a little iſland which Vaillant calls Hippopotamus Iſland; feeds on inſects.—Figuier acuti-pennes, *Vaillant's African Birds*, N° 133.

The Gilt-headed Warbler.—The prevailing colour is yellow; the upper part of the head and rump

rump orange; throat deep blue; wings and tail brown. Bill and legs pale brown; between the bill and eye each ſide a ſmall patch of white. Inhabits India.—Motacilla aurata, *Turton*, from *Cim. Phyſ.* 73. t. 38.

The LEAST WARBLER.—Above pale brown, beneath whitiſh; bill and very ſhort tail yellowiſh. Inhabits New Holland; three inches long.—Motacilla minima, the leaſt warbler, *Turton*.

The WHITE-EYED WARBLER.—This bird has been already deſcribed in vol. vii. p. 378, under the name of the Madagaſcar warbler; (but the real Madagaſcar warbler will be found at p. 336 of the ſame volume.) The eyelids are not membranous, as Buffon makes them, and as perhaps might be inferred from our former deſcription, but is formed of minute feathers, as Briſſon formerly obſerved, and which is now confirmed by Vaillant. This bird inhabits ſeveral diſtricts in the interior part of ſouthern Africa. The Dutch at the Cape, and the Hottentot ſettlers, call it *glaſs-oog*, glaſs-eye, or *wit-oog*, white-eye, which is the name it bears in the Iſle of Bourbon. Some of the coloniſts call it alſo *kneutje*. The male is correctly deſcribed in the place referred to. The female is ſomewhat ſmaller; her back is more of an olive-colour, throat and front of the neck of a duller yellow; the eyebrows are leſs apparent, being not ſo full nor of ſo bright a white. The young are not furniſhed with eyebrows till after the ſecond moult.

They go in flocks of ſix or eight, moſtly a ſingle family. They feed on inſects, eſpecially young caterpillars, and the eggs of butterflies, which they get in the trees. They build at the extremity or the low branches of the mimoſa-tree; the neſt is ſhaped exactly like that of our chaffinch; it conſiſts of thin bits of roots interwoven, covered outſide with moſs, and lined with down or hair; it is ſeldom more than two inches in diameter. The eggs are four or five in number; the male and female ſit alternately, and both

both are much attached to their young; "as I had occaſion to obſerve one day," ſays Vaillant, "when I found a neſt with four young ones which were ſo forward, that they jumped out before I could put my hand upon them. The old ones defended them with ſo much boldneſs and ſo little precaution, that I was able to kill them both with the ramrod of my gun." They are indeed not ſhy at any time: they utter a little ſong or cry, *tititititiri, tititititiri*, when they are ſeeking among the leaves of the trees for the inſects and eggs on which they feed.

The ſpecies is very common in ſouthern Africa, eſpecially about the river called Duyven-ocks, among the Caffres, at Bruntjes-hoogte, and others where are plenty of wood.—Motacilla Madagaſcarienſis, *Gmelin's Linn.* Tcheric, *Vaillant*, N° 132.

The RUFOUS-BELLIED WARBLER.—Olive-brown, beneath yelloviſh-rufous; quill and tail feathers brown. Inhabits Senegal; three inches and three quarters long. A variety of the citron-bellied warbler, vol. vii. p. 379. but made by Dr. Turton a diſtinct ſpecies. The tail is ſhorter.—Motacilla flaveſcens β, *Gmel.* M. rufigaſtra, *Turton.*

The PINE WARBLER.—Olive, beneath yellow: lores black; wings blue with two white bands. Tail ſlightly forked. Female wholly brown. Inhabits Carolina in ſummer; four inches and a half long.—Motacilla pinus, *Turton's Linn.*

The EQUINOCTIAL WARBLER.—Brown-teſtaceous; beneath white: rump pale; tail-feathers with obſolete bands. Inhabits Nativity Iſland: ſize of a ſparrow.—Motacilla equinoctialis, *Turton's Linn.*

The CAMBAY WARBLER.—Blackiſh-brown, beneath fine black, top of the belly and vent ruſty-rufous; wing-coverts white. Bill black; tail three inches long; legs brown. Inhabits India: ſix inches long.—Motacilla Cambayenſis, *Turton.*

The

The GUZERAT WARBLER.—Greeniſh, beneath white; crown cheſnut; quill-feathers and tail brown. Bill and legs pale brown; quill and tail feathers edged with green. Inhabits India; four inches and a half long.—Motacilla Guzurata, *Turton.*

The ASIATIC WARBLER.—Brown, beneath yellowiſh; head and neck black; lores and chin white; tail long. Bill blackiſh with a few ſmall briſtles at the baſe; breaſt with a few white ſpots; tail three inches and a half long, wedged, the outmoſt feathers pale from the middle to the tip. Inhabits Guzerat; ſize of a nightingale. There is a variety with the front, eyebrows, and body beneath, white; lateral tail-feathers half white.—Motacilla Aſiatica, *Turton.*

The CHATTERING WARBLER.—This and the two following reſemble, in characters and manners, our blue-throated warbler, vol. vii. p. 358. Like that, they delight in marſhy places, living among ruſhes and reeds, where they remain the whole year, and bring up their young. The preſent ſpecies has its name from a chattering noiſe which it makes almoſt inceſſantly, of *grigri-gragra,* in very varied tones. The neck is full of dark ſpecks on a white ground, inclining to brown on the under plumage. The feathers of the upper ſurface, including the head, wings, and tail, are of a dull brown, with a ſlight tint or ſhade of olive. Bill, feet, and eyes, light brown.

In the ſeaſon of love this bird perches upon the ruſhes, emitting a note ſomething like the babbler. During his ſong, which laſts for ſeveral ſeconds, he flutters his wings without moving from his place; then ſtops on a ſudden, and turns entirely over to join the female, who is generally beneath him; for her no doubt he exhibits all theſe little ſports. Vaillant ſays the connection often takes place upon the weak leaf of the reed, a moſt inconvenient poſition for an animal leſs vivacious and wanton than a bird. Among theſe reeds alſo the male and female build

their neſt, taking care to make it faſt to ſeveral of the ſtalks. The female lays five or ſix eggs, which are white ſpotted with brown; the male ſits as well as the female. The female is ſomewhat ſmaller than the male; her brown colour is not ſo dark, and her neck is not ſpeckled. Inhabits the marſhes of the Auteniquois, and of the *Verloore-valey*, or Loſt-lake, in Africa.—Caqueteuſe, *Vaillant*, N° 121, fig. 1.

The ISABELLA WARBLER.—This has the ſame manners and the ſame haunts as the preceding, and might eaſily be miſtaken for the female of that ſpecies. His ſong is alſo nearly the ſame; I mean his love-ſong when perched upon the reeds and inviting his female; for his warbling is very different, conſiſting of ſome very ſoft flute-notes. Vaillant is the more exact in deſcribing this ſpecies, ſince his obſervations are not founded upon the examining of a ſingle bird or a ſingle pair, but upon the attentive compariſon of more than thirty individuals.

This ſpecies is ſomewhat ſmaller than the preceding; the bill not ſo long, and of a much lighter colour. The female reſembles the male, except that ſhe is a trifle leſs. The colours are not ſhining, yet ſomething gayer than the laſt. The upper ſurface is of a delicate light brown, or iſabella colour; ſome blackiſh appears on the tips of the wing-quills behind. The throat, neck, breaſt, and all the under ſurface, white ſlightly tinged with rufous, which gives a yellowiſh caſt. The neſt is attached to four or five ruſhes cloſe together, which incloſe it; the eggs, five or ſix in number, are entirely white.—Iſabelle, *Vaillant*, N° 121, fig. 2.

The PROUD WARBLER.—The wings of this ſpecies are ſo ſmall and ſo weak, that it can ſcarcely fly at all; when at reſt, they barely reach the rump; of the ſixteen quills they conſiſt of, the two firſt and three laſt are almoſt nugatory, being ſo ſhort and of ſo delicate a texture. The bird therefore finds it very

difficult

difficult to ſuſtain itſelf in the air; and it ſeldom riſes much above the reeds and ſedge, in whoſe tufts nature ſeems to have deſigned it ſhould remain; when obliged to fly, which very ſeldom happens, it is with no ſmall difficulty that it heavily reaches a diſtance of fifty or ſixty feet, when it rather drops down through laſſitude than alights like other birds. To make amends, in ſome ſort, for the aukward ſtructure of the wings, nature has given it a very large broad tail: the tail-quills are ten in number, and amply feathered. In the love ſeaſon, the male ſpreads out his tail, making it fall upon his back in a circle, like the peacock; this is accompanied with a ſoft melodious ſong to invite the female; the female does not ſpread her tail; ſhe however receives his careſſes, ſays Vaillant, and returns them with intereſt.

The colours of this ſpecies, like the two laſt, are not diſtinguiſhed by any brilliancy. The head, neck, mantle, wings, and tail, are of a dark dull brown; the under parts lighter. The upper mandible of the bill is black; the lower yellowiſh; feet, nails, and eyes, browniſh. The female is ſomewhat ſmaller than the male; of a lighter brown; on her throat and neck are ſome browniſh lines on a lighter ground; her tail is not ſo large, that is, the barbs of the feathers are not ſo full and thick. The number of eggs is not leſs than five, and probably of a white colour. They neſtle among reeds in the marſhes about Blettenburg or Lagoa Bay; and are found throughout the whole of the Auteniquois country.— Pavaneur, *Vaillant's African Birds*, N° 122.

The CAPE WARBLER.—Above greeniſh brown, beneath and rump rufous grey; two middle tail-feathers blackiſh, lateral ones obliquely half tawny-brown. Inhabits the Cape of Good Hope: ſix inches long.—Motacilla ſperata, *Turton's Linn.* There is a variety, which has the chin white, and breaſt rufous.

The GAUZE-TAILED WARBLER.—This little

warbler, which is about the ſize of a wren, inhabits the iſland of Java; at leaſt it was ſent from that place to M. Temminck of Amſterdam. The moſt remarkable thing in this ſpecies is the manner in which the tail-quills are barbed; the feathers are ſo thinly ſcattered along the quills, as to have the appearance at firſt ſight of their having been ſtripped; but upon examination they are ſo regular, that there is no doubt but the "fringe or gauze tail" is the ſpecific character. The preſent ſpecimen had but three feathers in the tail; but on lifting up the coverts, the cells or ſockets of ſeven more appeared, which muſt either have been pulled out or dropped in moulting. The tail was certainly very much tapered; for, of the three feathers that remained, two, which were the middle ones, were equal in length, the other was ſhorter. This individual is ſuppoſed to be a male; extreme length, from the tip of bill to that of the tail ſix inches and a half. The bill is blackiſh, legs and feet brown. The head is of a rufous brown, which continues down the ſides of the neck, and all the under parts of the body. The throat and front of the neck are grey blue, ſhining and glittering like pearl, or oriental agate. The back of the neck is very dark brown mingled with lighter tints; the ſcapulars and wings are of a dirty brown edged with rufous. The tail is longer than the body; the quills are almoſt black for half their length; the remainder and the barbs are of a red brown; the tail is ſo tranſparent, from the feathers being ſo thinly ſown, that when laid upon paper you may read through it as through a piece of the fineſt gauze. The colour of the eye is not known, this being a ſtuffed ſpecimen, not a living animal.—Queue gazée, *Vaillant*, N° 130.

The PINC-PINC.—This is one of the ſmalleſt birds of Africa; in ſize and manners very like the wren; like that, it is in continual motion, buſily hopping from branch to branch among buſhes and ſhrubs; like

like that alſo, it carries its tail erect, and continues warbling while in ſearch of food among heath and ſmaller plants, where it loves to forage and conceal itſelf. Beſides its ſimilarity to the wren, it riſes perpendicularly like the lark to a conſiderable height from the ground or from ſome buſh; flapping its wings and tail very ſtrongly in its aſcent, and riſing by ſhort leaps, uttering its note of *pinc-pinc*, *pinc-pinc*, *pinc pinc*, the whole time. The children at the Cape call it the pinc-pinc from its note. If, when it gets to a certain height in the air, there ſhould be any wind, the little bird is preſently carried out of ſight; when it is calm, the bird, having reached the greateſt height his ſtrength will permit, deſcends in a diagonal line, but does not cloſe his wings in darting to the ground like the lark. The male and female are rarely ſeen aſunder; the male only, it ſhould be obſerved, has the power of taking high flights; the female ſometimes makes an effort, but ſeldom ſucceeds in riſing more than eight or ten feet from the ground; nor do either endeavour to ſoar, except in the pairing ſeaſon.

The neſt is admirably conſtructed. The foundation is laid, as ſtrongly as poſſible, among the ſpines of a thorny buſh, or at the extremity of a branch of the mimoſa-tree. The neſt is commonly very large, but ſome bigger than others, that is, as to the outer dimenſions, for within they are nearly all of the ſame capacity, three or four inches diameter, though the outward circumference is often more than a foot. It is made of the wool of plants only, and is either of a ſnowy whiteneſs, or browniſh, according to the quality of the down furniſhed by the ſhrubs in each particular diſtrict. The neſt is of a very irregular ſhape outſide, according to the direction of the branches or twigs; and to theſe it is ſo ſtrongly faſtened, that it is impoſſible to take it away without leaving much of it adhering, for it uſually embraces the whole circumference

rence of the branch. If it appears miſ-ſhapen outſide, the inſide makes amends for it; nor can we avoid being ſurpriſed that ſo ſmall an animal, with no other inſtruments than its bill, wings, and tail, could have beaten and preſſed its materials into a texture as cloſe and ſmooth as good linen cloth. At the upper part of the neſt is the entrance-hole like a chimney; and, what is very curious, at the baſe of this tube or corridor on the outſide, there is a landing-place, like a very little neſt fixed againſt the larger one. It is generally underſtood at the Cape, that this little neſt is intended as a lodgement for the male, that he may watch while the female is hatching, who, being at the bottom of the neſt with her eggs, cannot ſee any danger from without. Sonnerat has deſcribed the neſt very well, but has given a very incorrect figure of it, which is the more ſtrange, as he actually brought ſeveral of them with him to Europe; he has aſcribed it to the Cape titmouſe alſo, inſtead of the bird it really belongs to; and in this error he has been followed by Buffon; and by us, vol. vii. p. 439. The titmouſe does indeed ſometimes take poſſeſſion of this neſt; and hence the miſtake.

Vaillant however aſſerts that the intention aſcribed to this ſupplementary neſt is nothing but a popular error; for the male, he ſays, ſits as well as the female, and one never remains on the watch while the other is on the eggs; of this he is certain, having watched the birds for whole mornings together, and ſeen at leaſt an hundred ſuch neſts. This little receſs, therefore, is nothing more than a landing-place or rooſt, whence the bird may conveniently get into the hole and drop into the neſt; which otherwiſe would be attained with difficulty, and he could hardly hit that little aperture when on the wing; and the neſt is ſo ſoft outſide, that, ſhould he often perch upon it, it would be liable to damage, whereas this rooſting-place is made as ſolid and firm as the inſide of the neſt; and ſince, to

give

give it this ſolidity, the bird has no other mode than to beat with his wings, and preſs it by turning his body over and over, it naturally acquires a ſpherical form, like a little neſt; and this has led to the idea, by no means unnatural, that it was intended as a centry-box for the male. But this is not the caſe; for, when the mouth of the neſt is ſo ſituated as to be eaſily attained from a branch or twig, then this cell does not exiſt at all. Some of theſe neſts have two or three ſuch landing-places; and in ſome they are not ſhaped at all like a little neſt. In general theſe birds, on returning to their neſt, firſt perch on ſome neighbouring twig, then upon the edge of this little cell, and thence head-foremoſt through the hole into the neſt.

Theſe birds are not ſhy, ſo that you may come very near them, and they will go into their neſt while one is looking on, eſpecially in the wilder cantons, where the children never hunt them. Yet, ſays Vaillant, I never could take them in the neſt, not even in the night; becauſe the neſt, though generally in ſight, is ſo well fixed amidſt the thickets, that it is not poſſible to get at it without making too much noiſe; for it is never placed upon an inſulated ſhrub, but always in a thick buſh difficult of acceſs. The laying is from five to eight eggs, uſually ſix, more or leſs ſpeckled with brown according to the age of the female, that is, leſs ſo at the firſt laying than at the ſecond. It ſhould alſo be obſerved, that the firſt neſt is never ſo large nor ſo well made as the following ones; an obſervation which applies to birds in general.

So ſoft and commodious a neſt as that of the pinc-pinc excites envy in other birds; and, moſt of them being ſtronger, he is often driven out of his houſe, after ſeeing his little family deſtroyed, or his female's eggs broken to pieces; ſometimes the ſame pair has ſeveral neſts deſtroyed one after another in the ſame ſeaſon. The enemies of the pinc-pinc are, among birds,

birds, the titmouſe and the barbet; of quadrupeds, the mouſe; of inſects, the waſp and the ant. Even reptiles will glide into the neſt, eat up the young or the eggs, and take up their lodging in the place. So formidable and ſo numerous are the enemies of this little creature! The titmice, or the barbets, when they ſeize upon a neſt of this kind, have nothing to do but to enlarge the orifice, which they perform without much difficulty, becauſe it is compactly formed, very thin, and will ſtretch a good deal. Mice will bring forth their young, and lay up their winter proviſion, in one of theſe neſts. Reptiles will conceal themſelves alſo therein, but chiefly a kind of green ſerpent found on trees and buſhes, whoſe bite is harmleſs. The waſps and ants, when they take poſſeſſion, conſtruct cells in the interior, where they depoſit their larvæ; the ants are of the winged kind.

The male pinc-pinc is three inches eight lines in extreme length. His colours are not brilliant; the plumage of the upper ſurface is dark brown edged with a lighter tint; the under part ruſous white, ſpeckled with brown; the tail, which is very ſhort, is light brown on the outer barbs, blackiſh within, but tipped with white; it is ſo tapered as to form a ſemicircle when ſpread out; the rump and lower belly are reddiſh; bill and eyes brown, legs and feet dull yellow. Upon the whole, the plumage bears ſome reſemblance to that of the lark, eſpecially the female, whoſe colours are flatter; the male perhaps may remind us rather of the colour of the common grey partridge.

The pinc-pinc ſits fifteen days, and is one of thoſe to whom the cuckoo confides her egg, which however muſt be dropped or puſhed in, for no cuckoo could enter the orifice of one of theſe neſts, not even the gilded cuckoo, called by Vaillant *didric*, which is one of the ſmalleſt of the African ſpecies; (ſee p. 237.) and he obſerved that the neſts wherein was found the cuckoo's eggs, were not at all damaged,

as

as if the entrance had been forced; it was not till the cuckoo began to grow pretty large that the neſt loſt its ſhape. For the mode by which the cuckoo conveys her egg, ſee p. 238 of this volume.

It ſeems very extraordinary that a little bird which often abandons her own eggs when they have been handled, ſhould condeſcend to hatch the egg of another bird, who, having deſtroyed all her's, leaves her one much larger; although in general the cuckoo lays an egg ſmaller in proportion to her ſize than other birds, it is equally certain, that there muſt be a conſiderable difference in ſize between the egg of any cuckoo and that of a bird ſo ſmall as the pinc-pinc, which we have deſcribed to be no bigger than a wren. Beſides, a large egg muſt be more inconvenient to the little bird to ſit upon than ſeveral ſmall ones; ſo that ſhe certainly muſt be conſcious, ſays Vaillant, that ſhe is not hatching her own. And how can we conceive, continues he, that the young cuckoo, who at fifteen days old muſt be big enough to ſwallow both father and mother, does not ſcare them away. All this muſt be regulated by the ſpecial direction of Providence.—Pinc-pinc, *Vaillant*, N° 131.

The FLOWER-PECKER.—This is probably the ſmalleſt bird in Africa; it is leſs even than the creſted wren; (ſee vol. vii. p. 399.) The bill is extremely weak, as ſtraight as a needle, without any bend or ſwell, and ſcarcely any greater breadth at the baſe; its mouth therefore is proportionably ſmall; and it can feed only on very ſmall inſects, which it ſeeks for among the flowers or bloſſoms of trees, picking and digging into the petals, to get at the minute ſcarabæi which lie in the calyces of ſuch flowers. Seeing theſe birds conſtantly darting their bills into the flowers of prickly ſhrubs, it might be ſuppoſed that they belonged to the creepers, ſome of whom draw their nouriſhment from the juices they contain; but, upon diſſection, we find that is impoſſible; for their tongue,

which is hardly viſible, is not hollowed out like a trunk, nor reticulated, nor capable of being darted into the bottom of the calyces of flowers, as in thoſe birds which pierce them and extract their juices, and in the woodpeckers. Nor has any thing been found in their ſtomachs but the remains of very ſmall inſects, mixed with ſome ſmall grains of ſand and bits of flowers; of two-and-thirty which Vaillant killed, he never found in their gizzards the leaſt appearance of grain or ſeed; it is certain therefore that they live only on inſects, and thoſe of the ſmalleſt kind, which they pick out from flowers and leaves.

This ſpecies is not much extended; Vaillant obſerved them only in one diſtrict, about a place he calls Heere Logement, and thence to Elephant-river and a little farther. Like the preceding, they go in little flocks of ſix or eight: they are very nimble, and continually in motion from flower to flower, which, added to their diminutive ſize, makes it very difficult to ſhoot them. Their note is *zizizi*, *zizizi*, ſo weak as hardly to be heard did not the whole flock ſound it together.

The colours are not remarkable. The throat is whitiſh; the reſt of the under part of the body faint yellow; the wings and tail are light brown, the reſt of the upper ſurface ſlate-colour; the eyes are brown, legs and feet browniſh. The male is diſtinguiſhed by a little tuft of feathers on the upper mandible, directly over the noſtrils; they are partly white, partly black, raiſed, and directed forwards. This is entirely wanting in the female; her colours are alſo duller. The neſting, &c. are not known. Vaillant thinks this ſpecies a link between the fig-eaters and the titmice.—Bloem-piker, becque-fleur, *Vaillant*, N° 134.

The Curved-bill Fig-eater.—This ſpecies is plentiful about the Elephant-river, where it is called *krome-bec*, which in Dutch ſignifies a curved bill. As the bill of the Motacilla genus is in general ſtraight, this

this bird might be miſtaken for a colibri, or for a creeper, but it has not the tongue of the firſt, nor the feet and tail of the laſt. Its tongue reſembles the preceding ſpecies, therefore we need not repeat what we have juſt ſaid. It ſeeks its food in the ſame manner; and Vaillant ſays it might be regarded as a genus between the fig-eaters and the creepers; and into ſuch genus many of the *certhia* genus would find admittance, as ſeveral are deſcribed under that head which he ſays neither climb nor dart their tongues, of which he gives one inſtance, the Bourbon creeper, (ſee vol. v. p. 76, of this work.) The colours of the curved-bill fig-eater moreover ſufficiently diſtinguiſh it from the creepers; its hue is ſo ſimple and monotonous, that it would hardly be diſcerned among the branches of mimoſa where it commonly reſides, but for its extreme vivacity and little ſong. The male is commonly ſeen accompanied by his female, who reſembles him ſo much, that they can hardly be diſtinguiſhed but upon diſſection: the bill of the female is ſomewhat ſhorter, yet this part in the young males is as ſhort. Theſe birds conceal their neſts with great care; Vaillant could never procure one, though he offered a premium to his Hottentots for that purpoſe. The upper ſurface of the body, head, neck, wings, and tail, are grey-brown, almoſt cinereous; the under parts faint red, darker under the belly and tail; bill light brown, eyes hazel, legs and feet reddiſh. Extreme length, four inches and one line. Theſe birds are found on the banks of the Green River, and of the Great or Orange River, but chiefly about the Elephant-river; and on the mimoſa ſhrubs they are continually reiterating their cry of *tic-tic-tic, tic-tic-tic-tric.*

It is ſubject to vary, as ſome have many white feathers. Vaillant has figured one which had the tail and wings almoſt entirely white; but he acknowledged it was a young one that had not yet moulted,

therefore by no means a permanent variety.—Crombec, ou figuier à bec courbé, *Vaillant*, N° 135.

The Carmarthen Wood Wren.—Above greeniſh, beneath yellowiſh: eyebrows yellow: belly and vent ſnowy. Bill duſky; irids hazel; upper part of the head, back, ſcapulars, and upper tail-coverts, lively yellow-green; cheeks and throat yellow; lower part of the breaſt, belly, and under tail-coverts, pure white; quill-feathers duſky, edged without with yellow-green; tail a little forked, and except the two outmoſt edged with yellow-green; legs yellowiſh-brown. Inhabits Europe, particularly the oak woods of Carmarthenſhire: five inches and a quarter long; builds on the ground a roundiſh neſt with an entrance near the top; eggs white, ſprinkled with ferruginous ſpots.—Motacilla ſylvicola, the wood-wren, *Turton*, from *Linn. Tranſ.* iv. 35. It ſeems greatly to reſemble the *wood-wren* already deſcribed from the 2d vol. of the ſame work. See p. 428 of this volume.

The Carolina Yellow-poll.—Olive-green, beneath yellowiſh: quill and tail-feathers brown, the lateral ones edged with yellow. Inhabits Hudſon's Bay: ſize of the yellow-poll, vol. vii. p. 403.—Motacilla Carolinenſis, *Turton*.

The Hudson's-Bay Warbler.—Ruſty-brown, beneath whitiſh; neck beneath with duſky ſtripes; outmoſt tail-feather white, ſecond white edged within with black, third white on the diſk. Bill and legs yellowiſh-brown; body above brown, the feathers edged with ferruginous; chin and throat pale ferruginous; tail blackiſh, three inches long. Inhabits Hudſon's Bay; ſix inches long.—Motacilla Hudſonica, *Turton*.

The Red Fig-eater.—This is one of the few birds deſcribed by Vaillant not from the living animal, but from preſerved ſpecimens. The male and female were given him by a gentleman, who informed him that their native place was Amboyna. The male

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is a beautiful bird, about the ſize of our blue titmouſe, *Parus cæruleus.* All the upper ſurface, from the forehead to the tail-coverts, is of the pureſt vermilion, except that on the head and neck ſome of the feathers are tipped with black; the throat, front of the neck, and breaſt, are of a fainter red, ſlightly ſhaded with yellow; the flanks, belly, plumage on the thighs, and under tail-coverts, are ſlate-colour. The wings and tail are abſolutely black; the tail is ſhort; the wings reach almoſt to the end of it. Bill, legs, and feet, horn-colour. Total length three inches three lines. The female is not ſo ſtout; thoſe parts which in the male are red, are in her of a light brown or fawn-colour; wings and tail dark brown inclining to black; the reſt as in the male.—Figuier rouge à ailes et queue noir et ventre gris, *Vaillant,* N° 136.

PARUS, THE TITMOUSE.

Vaillant is of opinion, that many birds have been included in this genus which have no reference to it whatever. He ſays that the ſpecies deſcribed by Kolbe as inhabiting the Cape are not to be found there, and that he has omitted the three ſpecies which really are African titmice. All the birds that Sonnerat deſcribes as titmice, Vaillant rejects entirely; and about three parts of thoſe of other authors, and eſpecially all thoſe ſaid to be found in America; for he poſitively aſſerts that the titmouſe is not at all an inhabitant of the new continent; neither is the toucan.

He denies what Briſſon aſſerts, that the tongue of the titmouſe is pointed like a hair-pencil, and that it climbs trees like the woodpeckers. The tongue of the titmouſe is cut ſquare, and terminates in four thin ſharp fibres at equal diſtances; theſe are uſeful in getting out of the ſhell the ſeeds which the bird has already broken with its bill; theſe fibres are cartilaginous, and have no ſimilarity to briſtles, or the hairs of a pencil. He then proceeds to give the marks by which

which he ſays they are really diſtinguiſhed; and deſcribes the only three ſpecies he met with from the moſt ſouthern point of Africa to the tropic.

The titmice have a muſcular body, very fleſhy in proportion to their height; their feet are nervous, ſtrong, and generally thick; the tarſus is ſhort; the toes long and hooked, proper for faſtening themſelves to any thing, and indeed they hold very tight with their ſtrong claws. The bill is thick at the baſe; the upper mandible ſomewhat convex; the lower is as ſtrong as the upper, and both are a little flatted at the ſides, and end together in a rounded point. The bill, which is ſtrong of itſelf, acquires additional force by its poſition, ſince it is ſo fixed as to anſwer exactly to the middle of the head, which is round, and of remarkable ſolidity by the thickneſs of the cranium. The forehead is much raiſed; the baſe of the bill is ſhaded by ſome ſtiff feathers directed forwards, and partly hiding the noſtrils. The titmice do not cruſh the ſeeds they feed upon; they break them, and pick out the inſide; they have even ſtrength enough in their bill to pierce the ſhell of a nut or an almond, and draw all the kernel by bits through the hole. They alſo feed upon caterpillars, ſpiders, butterfly-eggs, and upon ſoft inſects in general, which they find upon the leaves of trees, or pick from under the bark, which they can remove with their bill while they cling to the trunk; which has made ſeveral naturaliſts ſuppoſe they had the faculty of climbing like the woodpeckers, though they really cannot change their poſition without ſpreading their wings, and taking a ſhort flight, or at leaſt a ſidelong jump, but never without a motion of the wings; a mode very different from the climbing of woodpeckers.

They hide their young with great care, making their neſt out of ſight, in the hole of a tree or cleft of a rock, or in an old wall. They lay a great many eggs, and always retire into holes to ſleep; they alſo accumulate

mulate a winter-ſtore of proviſions. As for their habits, they are lively, alert, ever in motion; it is ſuppoſed they conſume a deal of food, as they are always foraging. They are heard at the very dawning of day, and are the laſt of the diurnal birds that retire; ſo that the nocturnal birds of prey make great deſtruction among them; and to this they are the more expoſed by their own deſperate courage, for they will attack an owl without heſitation. If they kill their enemy, they directly break the ſkull with the bill, and feed upon the brains. They are naturally cruel, like the ſhrikes. Buffon had ſeen ſome tamed ones attack any weaker birds that were put into the cage, kill them, and ſuck their brains. In this propenſity the African ſpecies, according to Vaillant, are exactly ſimilar. He adds, that they are not ſhy, but may be eaſily caught in any ſnare; that they are eaſily tamed, and ſhow a certain degree of attachment towards thoſe who feed and attend them.

The BLACK TITMOUSE.—Size of the great titmouſe, Parus major, vol. vii. p. 430. It is entirely black, except a few white ſtreaks upon the wings and tail; the head and back are however of a more decided black than the front and under parts of the body. The tail-quills are black for the moſt part, but the lateral ones have a broad white edging along their outer barbs, and their tips are white; the interior ones have leſs and leſs white as they come nearer the two middle feathers, which are entirely black; the two outer quills are a little ſhorter, the reſt equal in length. The wing reaches about one third the length of the tail; its larger quills are a browniſh black, ſlightly edged with white; the mid-quills have a broader edging, and the laſt broader ſtill, for upon them the border forms a long white ſtripe; the great coverts are black edged with white; the mid-coverts entirely white; the ſmaller ones entirely black; ſo that the wings are agreeably variegated with black and white. The bill

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is black; eyes dark brown; nails brown, feet and legs lead-colour. The female is rather ſmaller than the male, and not of ſuch a jetty black, eſpecially on the breaſt, where there is an appearance of grey, which becomes lighter as you approach the under-coverts of the tail, which are tipped with white. In the young birds, the borderings have a rufous tint, the black of the upper ſurface is rather inclined to brown, and of the under parts to grey. Theſe birds retire every evening to the holes of trees where their neſt is placed, which is made of twigs lined very nicely with wool: the eggs are ſix to eight in number, and entirely white. The ſong is preciſely the ſame as that of the great titmouſe, which laſt however is never found in Africa. The black titmouſe is plentiful near the Sondag and Swart-kop rivers, and in Caffraria; but not on the weſt coaſt, or near the Cape.—Meſange noir, *Vaillant's African Birds*, N° 137.

The Variegated Titmouse.—In ſhape and general characters reſembles the preceding, but is ſomewhat ſmaller; ſong the ſame. Found only in the mimoſa-thickets of Camdeboo, where it is called *Malabartje*, or "little Malabar," on account of its black head.

Though ſmaller than the preceding, the bill is rather longer. At firſt ſight it might be miſtaken for a female or young male of the laſt ſpecies. The top of the head is black; and alſo the back of the neck, where the black is bounded by a large white ſpot forming a half-collar; a broad white ſtripe goes from each corner of the mouth, and covers the cheeks, runs upwards underneath the eyes, (which are brown,) and downwards till it meets the white on the bottom of the neck, and thus encloſes the jet-black covering of the throat; the black covers the entire throat, and falls down like the corner of a handkerchief on the breaſt, whence the white runs along the middle of the body as far as the belly. The back, ſcapulars, and mantle, are

are blue-grey or ſlate-colour; ſo are the flanks, but ſomewhat lighter than the back. The wing-quills are brown black, liſted with white, this liſt is broader as the feathers are higher up on the back; the great and middle coverts are alſo brown, with broad white edgings; but the ſmall feathers of the pinions are of the ſame blue-grey as the back. The upper tail-coverts are black; the under ones light grey, edged with white. The tail is in general black, but the outer quill on each ſide is edged and tipped with white; the ſecond pair have a narrower edging, the reſt are only white at their tips. The bill is browniſh black; legs and feet bluiſh, nails almoſt black. The female is rather ſmaller. The white edgings are not ſo viſible, being of a leſs pure white; the head and throat are of a brown black; and all the grey parts have a ſlight tint of rufous. In the young bird, the throat is ſtill more brown, and the grey parts fawn-colour. Its neſting not known.—Meſange griſette, *Vaillant*, N° 138.

There is a variety of this ſpecies, with white wings and tail, and the throat ſpotted with white. It was in company with eight others of the ſame ſpecies, and was the only one ſo marked. It was a male, bearing its firſt plumage; it never had moulted.—Variété de la meſange griſette, *Vaillant*.

The BROWN TITMOUSE.—This is the ſmalleſt African ſpecies, and the only one Vaillant met with about the Cape, and in the colony. It inhabits the rocks and mountains, and is about the ſize of the P. cœruleus, or blue titmouſe: it has the ſame ſhrieking note, (ſee vol. vii. p. 434.) at the ſame time that it utters the *gra-gra gra-gra* of the other two African ſpecies we have mentioned, which laſt ſeems to be common to all the titmice when they ſee any thing that ſurpriſes them, a miſchievous animal or a bird of prey. When we ſay all the titmice, we muſt be underſtood

to mean only thoſe which Vaillant allows to be ſuch; their colours he ſays are alſo diſtributed in the ſame manner.

The brown titmouſe of Africa prefers rocky and mountainous places, concealing its neſt very carefully in a hole: the neſt is very large, conſiſting of moſs, much wool, and ſome feathers; the eggs are from eight to fourteen in number. Similar to the titmice of Europe, the ſmalleſt ſpecies lays the greateſt number of eggs; thus we know, that the long-tailed titmouſe of Europe, which is ſtill ſmaller than this African ſpecies, lays ſeventeen or eighteen eggs. See vol. vii. p. 439.

The head, neck, throat, and breaſt, are black; the large black patch on the breaſt goes tapering as far as the belly; a white ſtripe goes from the corners of the mouth, widens a little on the cheek, runs down the ſides of the neck, ſeparating the black of the throat from that of the hind-head, at the bottom of which there is alſo a little white ſpot. The feathers at the baſe of the bill, and thoſe which cover the noſtrils, are white. The back and ſcapulars are brown; ſo are the large wing-feathers, but blacker on their inner barbs; the mid-quills are edged with white, as well as the large and middle coverts, which are the blackeſt parts of the wing. The tail, except the white fringe which borders all the feathers of it at the tip, and a white line along the outermoſt feather on each ſide, (which alſo are ſomewhat ſhorter than the reſt,) is dark brown, as are the upper coverts of the ſame. The flanks, lower belly, and under tail-coverts, are of a beautiful rufous grey. The bill is black; eyes and nails brown; the feet are lead-colour. The wings, when at reſt, reach about half-way the tail. The female is ſomewhat ſmaller than the male, but ſo like that it is almoſt impoſſible to diſtinguiſh them.—Meſange brune, *Vaillant's African Birds*, N° 139. fig. 2. erroneouſly marked, fig. 1.

The

The WHITE-CHEEKED TITMOUSE.—This was given to Vaillant by M. Temminck of Amſterdam, who received it from Batavia. It is about the ſize of the preceding, and ſhaped like the blue titmouſe. The top of the head is black, as is the back of the neck, below which appears a ſmall patch of white, from the corner of the mouth proceeds a white patch which covers the cheek, but reaches no farther than the ear, which it ſpreads over. The throat, front of the neck, and breaſt, are black; which black, inſtead of widening as in the preceding ſpecies, grows narrower from the lower part of the neck before, where it joins on the ſides the black of the hind-head, and terminates at the belly. The ſcapulars, mantle, back, and upper tail-coverts, are of a bluiſh grey; the ſame colour runs along the edges of the wing-quills, which are black; the larger wing-coverts are edged and broadly tipped with white. The three lateral tail-feathers on each ſide, are white, and graduated or tapered, i. e. the outer is the ſhorteſt, and the two others ſucceſſively longer; the reſt of the feathers are entirely black. The ſides, belly, and under tail-coverts, are whitiſh. The bill is brown grey; the claws black, the feet lead-colour. The wings when at reſt extend about one-third the length of the tail. Its habits are not known.—Meſange griſe à joue blanche, *Vaillant*, N° 139, fig. 1. erroneouſly marked fig. 2.

The BLACK-CAP.—This and the following were received by Vaillant from Ceylon. They reſemble in ſome reſpects the titmice; but he ſays do not properly belong to that genus. The bill is nearly of the ſame ſhape, but longer in proportion. The tongue is entire, cartilaginous, and pointed; different therefore from that of the titmouſe, which is truncated, and ends in four points. The legs are not ſo large, the claws weaker, the nails not ſo hooked; which denote different habits. The bones of the head are not ſo

ſtrong, the head not ſo round, the forehead flatter. In other reſpects the ſhape of the body, wings, and tail, and the ſize alſo, agree nearly with the P. major, or great titmouſe: but the wings are not ſo long, for in the black-cap they hardly exceed the ſetting on of the tail. The head is entirely black; the reſt of the upper ſurface, including the wings and tail, is olive-green, inclining to yellow on the rump; the lateral tail-quills are ſpotted with white at their extremities. The throat, front of the neck, and the whole of the under parts, are yellow; the bill is blackiſh, legs and feet brown.

As theſe were dried ſpecimens which Vaillant received, he can ſpeak no further but upon conjecture. The eyes he imagines were brown; the food inſects only.—He deſcribes and figures another individual, which he ſuppoſes to have been the female of this ſpecies, or at leaſt a variety. It was ſomewhat ſmaller, and the colours lighter; the head tan-colour; the upper ſurface of the body, wings, and tail, dun-colour, with various ſhades of yellow; the tail tipped with white; the under parts of the body delicate pale yellow; bill, legs, and feet, browniſh.—Cap negre, *Vaillant*, N° 140, fig. 1 and 2.

The Four-coloured Titmouse.—This differs ſtill more from the titmice; the bill being longer and thinner than in the laſt; in this reſpect it makes a nearer approach to the Motacilla, or warbler; yet it has not the weak ſlender body and long legs of theſe; the legs are ſhort, and toes thick, like the titmice.

Its habits are not known, Vaillant having received it from Columbo, the chief town of Ceylon; but he preſumes that it feeds on inſects like the preceding. In ſize it is ſomewhat ſmaller than the great titmouſe. The top of the head and hind part of the neck are entirely covered with a black capuchin, which covers the eyes alſo; the back and ſcapulars are graſs-green. The wing-quills are black edged with yellow; the great and

and middle coverts fringed with white at the extremities. The tail is alſo black, and outwardly edged with yellow; the feathers of an equal length. The throat, front of the neck, breaſt, ſides, and under tail-coverts, are of a beautiful jonquil-yellow, melting into green towards the legs and lower-belly. The bill is almoſt entirely black, only the ſharp edges of the mandibles are yellowiſh; the nails are black, the feet brown.

The female is ſomewhat ſmaller. The top of the head, back of the neck, mantle, ſcapulars, rump, and tail, are olive-green; and all the front of the body, from the throat to the under tail-coverts, is of a fainter yellow than in the male. The yellow edging of the wing-quills are broader; but the white on the tips is not ſo pure, being ſhaded with olive. This (female) Vaillant aſſerts to be the bird deſcribed by Briſſon under the name of *figuier du Bengale*, our Motacilla tiphia, or green Indian warbler, vol. vii. p. 378. The ſpecies might occur at Ceylon as well as at Bengal. Klein has deſcribed the ſame, N° 17. p. 75. and Edwards, vol. ii. Pl. 79.—Quadricolor, *Vaillant's African Birds*, N° 141. fig. 1, the male; fig. 2, the female.

HIRUNDO, THE SWALLOW.

Vaillant found three ſpecies of ſwift in Africa, one of which only bears great reſemblance to thoſe of Europe, or is perhaps the ſame; but he found ſix ſpecies of ſwallow, not one of which is to be met with in Europe; and he is well convinced that none of our ſwallows ever reach the Cape of Good Hope in their migrations, though Kolbe and ſeveral others aſſert that they do, and Buffon has copied theſe falſe teſtimonies. Although many ſpecies of European birds occur at the Cape, not one of theſe, Vaillant aſſerts, will be found to be really an individual come from Europe to the Cape, and afterwards to return. It is by no means certain

certain whither our migratory birds repair when they quit Europe; but one important point, which Vaillant wiſhes to impreſs on the attention of naturaliſts, is, that none of thoſe birds which abandon Europe for the winter ever produce a new covey during their abſence; and, the ſame point having been verified at the Cape in reſpect to birds which quit that place at a certain ſeaſon, we may be aſſured that all birds produce once a-year only, in whatever climate. They retire or emigrate for the ſake of food or of climate; ſo that, in whatever diſtant country we may find birds, ſimilar to our own, laying eggs, theſe cannot be the ſame individuals which have produced with us in the courſe of that year. The ſwallows and martins of Africa reſemble thoſe of Europe in exterior form, and ſtill more in their habits and modes of life; it is not therefore to be much wondered at that travellers ſhould aſſert that they had met with our European birds at the Cape.

"All the ſwallows which neſtle in the parts of Africa I have viſited," ſays M. Vaillant, "remain there during the ſummer-ſeaſon only, the time of the great heats; and all the ſpecies which are ſeen there during the winter of that country, or the rainy ſeaſon, (which is there called the bad monſoon,) are ſuch as come from other parts of Africa after having hatched their eggs; and they do not lay a ſecond time, as I have well obſerved by the ſize of the young ones they always bring with them; and, as thoſe who return in the ſummer to make their neſts as before never bring any young birds with them, it is evident they have not propagated during their abſence; an additional proof that birds do not produce at two ſeaſons of the year, whether in hot countries or cold. It is alſo to be obſerved, that birds of paſſage never arrive, in the country where they do not produce, during the pairing-ſeaſon of that country; it is natural therefore they ſhould not lay eggs, ſince the birds of that country do not lay while they are there. "Another

"Another important obſervation, upon the ſubject of migratory birds, is, that, while one ſpecies of bird, having completed its laying in one country, goes to another, other birds, *of the ſame ſpecies*, having in like manner produced their young elſewhere, come into that country which the former had quitted; which leads to the concluſion, that it is not always want of food that forces birds to expatriate, but the want of a change of climate. In Europe, where during the winter inſects are ſcarce, it is very natural that birds which feed upon inſects ſhould all leave us, or nearly all; yet there are ſome inſect-eating birds which viſit us and ſpend the ſevere ſeaſon among us, contriving to find ſubſiſtence. But in very hot countries, as Africa, whence all the ſwallows who have hatched their young emigrate at the approach of the rainy ſeaſon, it cannot be the want of food which cauſes them to depart, ſince at that very ſeaſon other ſwallows arrive which find abundance of food."

M. Vaillant therefore adviſes to conſider the birds in any country as diſtinguiſhed into three claſſes: 1. the birds belonging to that country, and which breed there; 2. ſojourners, who remain ſome months, but not during the breeding-ſeaſon; 3. birds of paſſage, which traverſe the country, without making any ſtay, and leave no progeny behind them. But what practice, labour, and obſervation, are required, to be enabled to make theſe diſtinctions!

As we have inſerted, vol. vii. p. 459, a letter which ſeems to revive the exploded notion of the ſubmerſion of ſwallows we ſhall inſert the following note to the editor of the Monthly Magazine for November 1802, which ſeems to account for the mode in which the writer of the letter might have been deceived.—"I know not whether the following obſervations concerning the common chimney-ſwallow, Hirundo ruſtica, will be of ſervice in proving any facts relating to their migration: but, not being an adept in the ſubject,

ject, and not being inclined to any particular ſyſtem, I beg leave to offer them to the naturaliſt. On the 25th of September, I obſerved the Hirundo ruſtica begin to leave the town of N———; and at one o'clock of the ſame day there were but a few ſtragglers left. But, happening to take a walk in the afternoon to the ſouth of the town, I obſerved thouſands collected on the trees in Mr. M———'s park, bordering on a fiſh-pond. There were a great many flying about, and eſpecially over the water, and at every inſtant numbers would dip under, and would even go ſome way before they would come up; ſo various were their evolutions, and ſo rapid their motions, that it was very difficult to follow one that went in and out again. As ſoon as they had dipped, they retired to the neighbouring trees to dry themſelves, and a tree which was decayed, and had no leaves, was wholly covered. I am convinced, that one who pleaded for their retiring under water during the winter ſeaſon, might have been eaſily deceived; but it appeared to me that they were cleanſing themſelves from the filth they had contracted, in order to lighten themſelves for their long and dangerous journey. On the 26th they all went away, and the water, which the evening before was a ſcene of confuſion, was now ſilent. J. E. B."

The RED-FRONTED SWALLOW.—Similar to the Cape ſwallow in form and ſize, but diſtinguiſhed by a red bandeau acroſs the forehead; and the belly is of a delicate white. The upper ſurface is of a gloſſy blue-black; the eyes are brown. The female is ſomewhat leſs than the male, and her tail ſhorter. The young birds are eaſily diſtinguiſhed, their tail being ſhorter ſtill, and their general plumage browniſh inſtead of gloſſy black. Vaillant met with this ſpecies in the ſouth of Africa, but only during the rainy ſeaſon, ſo that he concludes that it does not produce in that part of the country; having received ſeveral birds

birds of this ſpecies from Senegal, he ſuppoſes that it might be the ſpecies which Adanſon miſtook for our common chimney-ſwallow; if ſo, ſtill its native country is not diſcovered, for Adanſon expreſsly ſays they do not produce at Senegal, but arrive there in October, and retire in the ſpring. See vol. vii. p. 457.—Hirondelle à front roux, *Vaillant*, N° 245. fig 2.

The CAPE SWALLOW.—Buffon's *Hirondelle au capuchon roux*, or red-headed ſwallow, (which is our Cape ſwallow, vol. vii. p. 465.) Vaillant affirms to be the female of the ſpecies; ſo that the deſcription is defective, as the male really has not a red head, but a black one; the upper part of the back of the neck is however of a bright red, and ſo is the rump. The reſt of the upper ſurface is chiefly of a gloſſy black like our chimney-ſwallow; and from its general form, manners, and cry, this is the ſpecies probably which has been miſtaken for it; but we have before obſerved that our ſwallow is never found in Africa. The two lateral tail-feathers are lengthened out to a thread. The female reſembles the male, except as before mentioned, that her head is red, and the lateral tail-feathers are not ſo long.

This ſpecies ſpends the whole ſummer at the Cape. It is a very common bird in Africa, being found almoſt every where, eſpecially in inhabited places; they are ſo familiar as to enter houſes without fear; but this is chiefly in villages in the interior, for at Cape Town they are generally driven away on account of the dirt they make; but the peaſants willingly admit them to build in their very chambers, regarding them as the harbingers of good fortune, as do many people in Europe. The neſts of theſe birds, when built in a chamber, is faſtened to a beam in the ceiling, being formed of tempered earth, like thoſe of our ſwallow, but in ſhape totally different; namely, a hollow bowl with a long tube adapted for an entrance, and lined with down, or the ſofteſt materials the birds can pro-

cure. The eggs are white ſpotted with brown, in number from four to ſix; incubation laſts from ſixteen to eighteen days. Upon the whole, we might call this the common domeſtic ſwallow of Africa.—Vaillant has given it a name which he ſays betokens that the female only has a red head.—Hirondelle rouſſeline, *Vaillant*, N° 245. fig. 1.

The African Sand-Martin.—Like the common ſand-martin, (vol. vii. p. 466.) it frequents the banks of rivers, and marſhes; and lodges in holes of banks or broken-down ravines, but without making any neſt. This ſpecies paſſes the ſummer in the ſouth of Africa, where it produces its young, and quits that country during the rains. Its general colour is dark grey, lighter underneath; but the feathers of the wings and tail are edged with ruſous. The tail is ſhort, being not longer than the wings, and forked. The eyes are of a light yellowiſh brown; feet and bill dark brown. This ſpecies is in length about four inches and a half; ſmaller therefore than the European ſand-martin. The female is ſomewhat leſs.—Hirondelle des marais, ou brunette, *Vaillant*, N° 246. fig. 2.

The White-collared Swallow.—Introduced by Dr. Turton. It is black, with a white collar; and inhabits America.—Hirundo zonaris, the white-collared ſwallow, *Turton's Linn.* from *Cim. Phyſ.* 100. tab. 55.

The White-rumped Swift.—This is probably our black ſwallow, or rather perhaps the St. Domingo ſwallow, vol. vii. p. 469. Vaillant, however, makes it a diſtinct ſpecies. It is about the ſize of the common ſwallow; and of a dark-brown or black colour, except two white patches on the rump; but even theſe are not ſeen when the wings are cloſed; but the laſt feathers of the wings neareſt the back are alſo marked with white on their inner barbs; and thus ſome white is really viſible, which Vaillant thinks a ſufficient diſtinction. This ſpecies is very plentiful

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at the Cape; it is familiar, coming near the houſes, and living in the ſame places with the ſwallows, without however mixing with them, unleſs as an enemy, for it will ſometimes ſeize one of their neſts by main force; otherwiſe it makes a lodgement in a hole in a wall, or the crevice of a rock; the female lays four white eggs. The female is rather brown than black. The eyes are yellowiſh-brown.—Martinet à croupion blanc, *Vaillant*, N° 244. fig. 1.

The TUFTED SWALLOW.—A very ſmall bifid tuft or creſt forms the ſpecific character and the name. This ſpecies is merely a bird of paſſage in the part of Africa where Vaillant met with it, ſo that its country is not known, for we call that a bird's proper country where it produces its young. Being in the country of the Namaquois, M. Vaillant ſaw ſeveral flights of theſe birds coming from the north-north-weſt, and traverſing that country without ſtopping.

The tufted ſwallow has a very long tail, the lateral feathers tapering to a thread, as in our chimney-ſwallow; the wings are alſo very long. The tuft conſiſts of five or ſix narrow feathers, which ſloping from the middle of the head, bend upwards a little, and divide. The upper ſurface of this bird is of a fine ſilvery grey, darker on the wings and tail; the throat is of a lighter grey, indeed almoſt white; the breaſt darker, the belly and under tail-coverts lighter again. The legs and bill are lead-colour; the eyes brown.—Hirondelle huppé, *Vaillant*, N° 247.

The WHITE-THROATED SWIFT.—This bird is ſomewhat ſtouter and larger than the *Grand martinet à ventre blanc* of Buffon, according to the deſcription; but Vaillant is doubtful whether it may not be the ſame ſpecies; he had not an opportunity of comparing the birds themſelves: if really the ſame, it is our Alpine ſwift, H. melba, vol. vii. p. 483. The following is Vaillant's deſcription.

The whole of the upper ſurface, i. e. the head, back,

and ſides of the neck, mantle, rump, wings, and tail, are of an uniform brown, having a grey caſt in certain poſitions of the light, the wing and tail feathers are of a darker brown, but grow lighter at the edges. The tail is much forked. The throat is a patch of pure white; then the brown colour of the body is reſumed, and continued down the breaſt and along the ſides, forming a kind of frame to the dirty-white or yellowiſh of the belly. The under tail-coverts are dark brown edged with white. The bill is dark-brown; the mouth opens wide, like the Caprimulgus, or goat-ſucker; the legs and feet are covered with feathers of a light-brown colour; the eyes are yellowiſh brown. The female reſembles the male, but her colours are fainter.

This ſpecies abounds in all the parts of Africa which Vaillant explored; and it is known that he took a very wide range. They fly with aſtoniſhing rapidity, and always in numerous flocks; and their cry is ſimilar to that of our ſwifts when flying after each other. In Africa they make their neſts in rocks, laying four white eggs. The coloniſts at the Cape call all the ſwifts *wilſde ſwaluw*, wild ſwallow; but the ſwallows in general they call *make ſwaluw*, tame or domeſtic ſwallow.

The general diſtinctions which Vaillant notices between the ſwifts (martinets) and the ſwallows (hirondelles), are, that the former have ſhorter legs, and longer and narrower wings; and the inner toe lies ſideways, ſo that it can be turned before or behind at the will of the bird. The ſwifts have in general ten feathers in the tail, the ſwallows twelve; but this is not always to be depended upon as a diſtinction. A more obvious mark is that the ſwifts have their feathers ſhort, ſtiff, and of the nature of thoſe of the aquatic birds; thoſe of the ſwallows are always more delicate, ſoft, and oily. The ſwifts, therefore, are never better pleaſed than when it rains; "and tempeſts

peſts (ſays Vaillant) are their great delight. The ſwallows indeed fly about during gentle rains, and ſeem well pleaſed; but, if a ſtorm ariſes, or a violent ſhower, or a ſtrong wind, they preſently retire to their hiding-places; while the ſwifts are ſeen to brave the greateſt rains, thunder, and hurricanes, and take a real pleaſure in ſtriving againſt the elements when raging with the greateſt violence."—Martinet à gorge blanche, *Vaillant's African Birds*, N° 243.

The LITTLE SWIFT.—This, ſays Vaillant, is the ſwifteſt flying bird I ever met with, ſkimming the air with a velocity of a hundred toiſes in five ſeconds; if therefore it could or would continue its flight with the ſame velocity, it would clear half a league in about a minute, and might go round the world in leſs than twelve days. It is about four inches and a half long from the tip of the bill to the extremity of the tail. The whole plumage is jet-black, with a blue gloſs on the head, wings, and tail; the under ſurface is alſo entirely black. The eyes are reddiſh; bill and legs brown. The tail is deeply forked; the wings very long. This little ſpecies inhabits the eaſt coaſt of the Cape during the winter or rainy ſeaſon; but its real country is not known, for Vaillant obſerved that it never produced in that place; it was therefore only an emigrant. It frequents foreſts, retiring to a hole in a tree to paſs the night; morning and evening it flies to the ſkirts of the wood, catching and devouring on the wing the inſects and flies which it meets in the air, or reſting on leaves in its way. M. Vaillant never heard this bird utter any cry, which is ſomething extraordinary, nor ſaw it perched on the branch of a tree. —Martinet velocifere, *Vaillant*, N° 244. fig. 2.

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